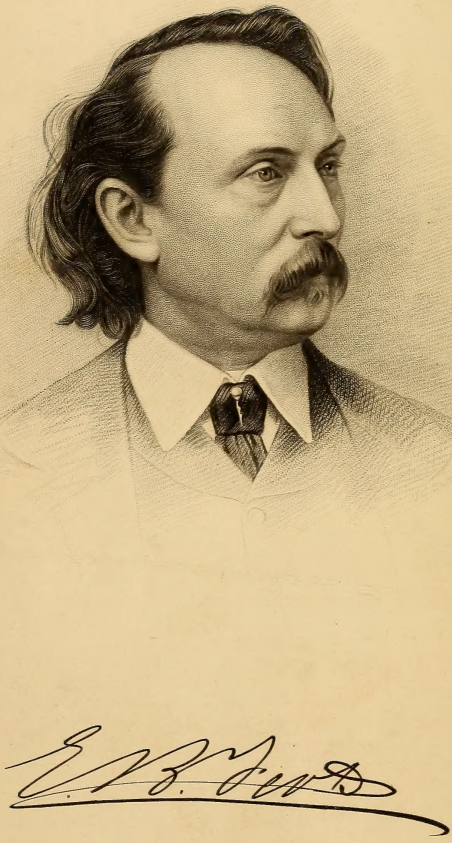

MEDICAL

COMMON SENSE

#7248

APPLIED TO THE

CAUSES, PREVENTION, AND CURE OF CHRONIC DISEASES;

AND

PLAIN HOME TALK

ABOUT THE

SEXUAL ORGANS; THE NATURAL RELATIONS OF THE SEXES; SOCIETY CIVILIZATION; AND MARRIAGE.

BY

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10

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PREFACE.

"Common Sense," I am aware, is quoted at a discount; especially by the medical profession, which proverbially ignores every thing that has not the mixed odor of incomprehensibility and antiquity. Medical works are generally a heterogeneous compound of vague ideas and jaw-breaking words, in which the *dead* languages are largely employed to treat of *living* subjects. Orthodoxy in medicine consists in walking in the beaten paths of Æsculapian ancestors, and looking with grave contempt on all who essay to cut out new paths for themselves. Progress is supposed to be possible in every thing except medicine; but in this science, which all admit has room for improvement, the epithet of "Quack" is applied to every medical discoverer. I trust I may prove worthy of the denunciations of the bigoted. This work is written for the amelioration of human suffering, not for personal popularity. To uproot error, and do good should be the first and paramount aspiration of every intelligent being. He who labors to promote the physical perfection of his race; he who strives to make mankind intelligent, healthful, and happy, cannot fail to have reflected on his own soul the benign smiles of those whom he has been the instrument of benefiting.

My intention in preparing this work is to supply a desideratum which has long existed, *i. e.*, a medical work, reviewing *first causes* as well as facts and ultimate effects, written in language strictly mundane, and comprehensible alike to the rustic inmate of a basement and the exquisite student of an attic studio; and if successful in fulfilling the promise of the title-page, I have too much confidence in the intelligence of the masses and the erudition of the unprejudiced scholar, to believe that it will be received with unappreciation and indifference. Many of the theories which these pages will advance are certainly new, and antagonistic to those of "old fogyism,"

but it does not follow that they are incorrect, or unworthy the consideration of the philosophical and physiological inquirer. They are founded upon careful observation, experiment, and extensive medical practice, and if the truth of the theories may be judged by the success of the latter, then do they unmistakably possess soundness as well as originality, for living monuments to the skill and success of the author have been and are being daily raised from beds of sickness and debility in every part of the United States. If these remarks sound boastful, be not less ready to pardon the conceit of a successful physician than that of a victorious soldier. The successful military chieftain is notoriously conceited; is it not as honorable and elevating to save life as to destroy it? If a man may boast that he has slain hundreds, cannot his egotism be indulged if he has saved the lives of thousands? I shall claim the soldier's prerogative, for when medical charlatans at every street corner are blowing their trumpets, it does not behoove the successful physician to nurse his modesty. What I write, however, shall be written in candor, and with an honest intention of enlightening and benefiting humanity.

It was with the foregoing preface that the author, about twelve years ago, issued a medical work bearing the title of *Medical Common Sense*—a book of about 300 pages, and something less than 100 illustrations. When that volume first made its appearance, some of my prudent friends shook their grave heads, and predicted for the author pecuniary failure and professional disgrace. Like those of many other prophets, their predictions proved to be only croakings, and the expected martyr soon found himself surrounded by hosts of new friends and swarms of new patients. While awaiting the popular verdict, after the first issue, one of the oldest and most noted clergymen of New York called at my office for the avowed purpose of assuring me how much he was pleased with the publication, and his appreciation possessed greater value to me because he had studied medicine in his youthful days, with the view of fitting himself for practice. He pronounced "Medical Common Sense" a refreshing contribution to medical literature, and expressed a hope that it would obtain a large circulation. I breathed easier, for the splendid phy-

sique, generous countenance, cultivated manner, and commanding presence of the first juror gave to his encouraging words the color and impressiveness of authority, and I almost felt as if the popular verdict had already been rendered; nor was this feeling delusive, for as the book continued to circulate, letters came in daily, like the droppings of the ballots on election days, from intelligent men and women in all parts of the country, thanking me for the information I had presented in language which could be comprehended by the masses of the people. The appreciation of the latter has been attested by the fact that over two hundred and fifty thousand copies have been sold, a circulation which I venture to affirm has been attained by no other medical work of the same size in this or any other country. While these books have, as I believe, benefited their numerous readers, the latter have in turn greatly enlightened the author.

My correspondence with the people has often exceeded one hundred letters per day, and the personal experiences and observations which have been confided to me by these numerous correspondents have enabled me to form some idea of the popular needs, and to supply, still further, that physiological instruction which is so greatly wanted to make mankind healthy and happy. In this revision, it has been my aim to present answers to pretty nearly all the questions which have been put to me during the past twelve years, and to recommend such measures for individual and social reform as will prove morally and physically beneficial. To fulfill my duties in these respects, I could not make a volume that would popularly be regarded as suitable for the centre table. Nor yet, is it a work that should find a place on some obscure shelf. It seems to me that the family library is not an inappropriate place for it. How far the heads of families may be willing to allow it to circulate among the younger members, it must be left for them to determine; but, if intelligent parents had had my experience, they would place this book in the hands of all children who are capable of being interested in it. In other words, they would take no pains to conceal it from children of any age, because only those who understand it will become interested, and all possessing this degree of comprehension are liable to obtain erroneous and injurious information upon the same topics through impure and corrupting channels, though much care be exercised to prevent it. This is a fact which a large correspond-

ence with young people has impressed upon the mind of the author, and would command the earnest attention of all parents and guardians, if they possessed the means of knowing that the writer does. I have received enough lamentations from the young of both sexes, resulting from their indiscretions, to fill these pages, and many of their letters do not hesitate to charge their parents with cruel neglect, in keeping from them knowledge of such vital importance. I am a father, and I have written nothing in this book that I desire to conceal from my children. One of the most gratifying evidences that I have pursued the right course thus far toward them in this one particular, is the fact that they approach me familiarly upon all physiological questions that interest them, and do not hesitate to consult me with reference to the most delicate matters appertaining to their physical organizations. It strikes me that this is as it should be; and when a parent cannot place himself or herself in this familiar attitude to a child, it becomes even more necessary that some book containing physiological information suited to the comprehension of the child be placed within its reach. If this work is adjudged unsuitable, may be other works can be found that will answer the purpose, although I doubt if there is another book wherein the relations of all the organs of the system to each other, and those of the moral nature to the physical body, are more faithfully traced. For the adult, this work contains information which no man or woman can afford to do without, when it may be obtained at a price comparatively so trifling. If the physiological deductions and social views of the author are dissented from, the valuable facts upon which they are based remain, and the reader is at liberty to use them to sustain opinions and suggestions which he may adjudge more acceptable to the popular mind. Any thing, every thing—that the human family may grow wiser and happier.

E. B. F.

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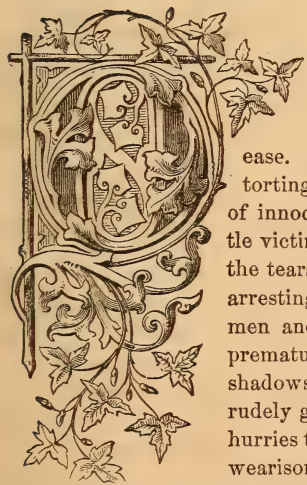
PART I.

Disease: Its Causes, Prevention, and Cure.

OPENING CHAPTER.

DISEASE AND ITS CAUSES.



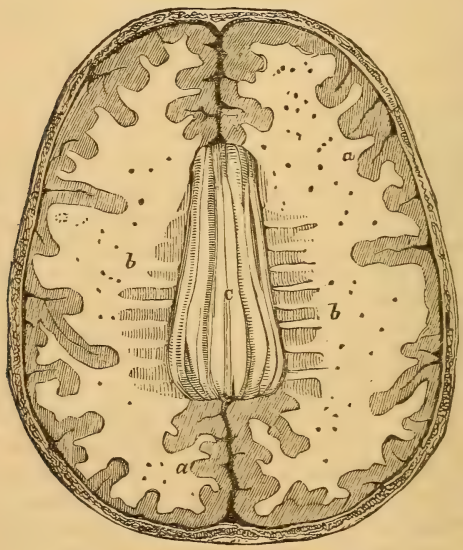
OUR planet with each revolution carries a huge load of human suffering, a large portion of which arises from disease. We see this enemy in the cradle, distorting the features and bedimming the eyes of innocent babes. Too often it carries its little victims to the burial-ground, bathed with the tears of mothers. We see it in youthhood, arresting the physical development of young men and young women; consigning them to premature graves, or moving them like sickly shadows through years of hapless life. It rudely grasps people in the prime of life, and hurries them away from fields of useful labor to wearisome chambers, where the mind, which has been schooled to activity, becomes a dangerous ally to the enemy by chafing and fretting in its imprisonment. It lays violent hands on our gray-haired fathers and mothers, who yesterday greeted us with the smile, animation, and elasticity of youth, but who to-day go groping about with rounded shoulders and trembling steps. At

last, it arrests the physical functions, the outer shell returns to its original dust, and the inner, living body, enters the new life, where —may we hope—this fearful disturber of our comfort and happiness is refused admission.

The Causes of Disease.

Disease of every character, except that which may be induced by poison or by accident to body or limb, originates in a derangement of the circulation of vital electricity, disturbance of the mind, or an abnormal condition of the blood. Wherever it begins, unless speedily checked, the whole system is soon convulsed in its grasp, because of the close relationship existing between the various organs of the

Fig. 1.



CAPITOL OF THE NERVOUS SYSTEM.

The above represents a horizontal section of the brain and bones of the skull; *a a*, outer layer of ash-colored matter; *b b*, the white or internal substance of the brain; *c*, the corpus callosum.

body. Those who have neglected the study of Physiology, as well as all who have merely scanned the pages of ancient and modern

superficial writings, will not readily comprehend the truth of these propositions. The most illiterate men of the civilized world are aware that they have a brain (however barren of idea), and that their bodies have nerves, arteries, and veins. But few physicians, especially of the old prejudiced school, know the real offices of them. Doctors who have brandished scalpels in the dissecting-room can point out the exact locality of every nerve, vein, muscle, tendon, etc., but the means by which each performs its appropriate part, seldom awakens curiosity. Turn to a Medical Dictionary for a definition of the brain; the learned physiological lexicographer says :—"The use of the brain is to give off nine pairs of nerves and the spinal marrow, from which thirty-one pairs more proceed, through whose means the various senses are performed, and muscular motion excited." This is all very well so far as it goes, but it will not satisfy the mind of a thorough inquirer, nor illustrate the truthfulness of my first remark. The sublime powers and superior beauties of the brain are undiscovered in such a superficial definition. The object of this chapter requires a better one. Let us have a *name* for the brain which will convey a better understanding of its office. I propose to call it the CAPITOL OF THE NERVOUS SYSTEM. It stands in the same relation to the human body that Washington does to the United States. There are telegraphic wires proceeding from Washington which connect with other wires leading to every part of the Republic, and there are nerves proceeding from the brain which connect with other nerves leading to every part of the human system. These nerves are like telegraphic wires, and convey impressions to and from the brain with the velocity of lightning. They permeate the skin so extensively that a slight change in the atmosphere is quickly telegraphed to the physiological capitol. Experiment has demonstrated the fact, that the intelligence of an impression made upon the ends of the nerves in communication with the skin, is transmitted to the brain with a velocity of about one hundred and ninety-five feet per second. Intelligence from the great toe is received through the nervous telegraph at the physiological capitol, called the brain, in only about one-thirtieth of a second later than from the ear or face.

The digestion of food, by which process blood is manufactured, depends upon the electric currents sent by the brain through the pneumo-gastric telegraph, or nerve, to the stomach. The correctness

of this hypothesis has been illustrated by experiments, tried by a celebrated physician in England. In these, a couple of rabbits were selected, which had been fed with the same kind and quality of food. On one of them he performed the operation of cutting the pneumogastric nerve leading to the stomach. The latter being deprived of the nervous stimulant, the animal soon died from the effects of a loaded stomach coupled with suspended digestion. The other rabbit, which was not operated on, was killed after an interval of almost twenty-six hours, and on examination it was proved that the food in his stomach was entirely digested, while in that of the former, the food remained almost as crude and undigested as when it left the masticating organs. Another experiment was made upon two more rabbits in the same manner, except that after the nerves leading to the stomach were cut, galvanism was applied in such a way as to send the current through the disconnected nerves to the seat of digestion. At the end of twenty-four hours they were both killed, when it was found that the food in the stomach of the one whose nerves had been severed, and put in connection with the galvanic battery, was nearly as well digested as that in the other, which had not been operated on. These experiments show that the stomach depends for the performance of its office on the electrical or nervous stimulus which it receives from the brain. Similar experiments to those just mentioned have been tried with reference to the heart and other organs, in all of which they ceased to perform their functions when the nerves were cut, and commenced again as soon as the galvanic fluid was applied. It is not necessary for the purposes of this essay, to demonstrate that galvanism and this nervous element provided by the brain are identical. It is evident that they are not; but they are so closely related that one will perform the office of the other, and this fact is sufficient to show that the two forces or elements are similar in their character, and that one is a modified form of the other. Animal magnetism, electro-magnetism, galvanism, and electricity, all differ a little from each other, and in employing the term *electricity*, chiefly, in speaking of the nervous forces, I do so because it is a term better understood by the masses.

I have said the brain is the capitol of the nervous system. It may also be called the great receiving and distributing reservoir of nervo electricity. It is largely composed of two substances, one an ash-colored matter, which, if spread out, would cover a surface of six

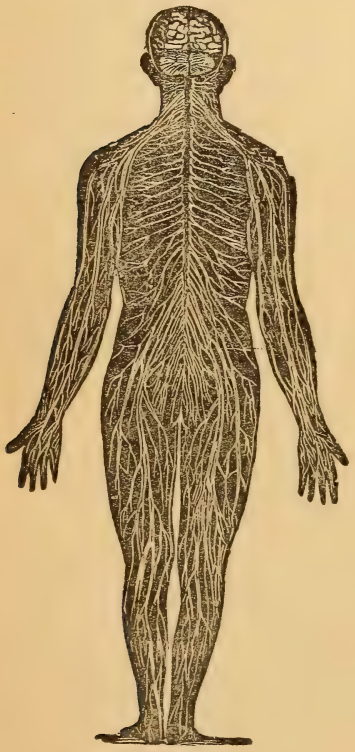
hundred and seventy square inches; the other, a fibrous matter, firm in texture, and tubular. The ash-colored matter is the receiving, and the fibrous matter the distributing reservoir. There are in other parts of the system various smaller receiving and distributing reservoirs, composed of the same substances, but all these are under the control of the superior one located in the brain. These are called by physiologists nerve centres, and to carry out the analogy between our nervous system, and the telegraphic system of our country, the nerve centres may be compared to our State capitals.

The spinal cord is the great nervous trunk, or the main telegraphic wire leading from the brain, and from the brain and spinal cord proceed the motor nerves, the nerves of sensation, and the nerves of special sense. With the motor nerves the mind telegraphs to the limbs to move, and they instantly obey, for the force they carry contracts one set of muscles and expands another; for electricity, whether animal or mechanical, has the power to contract or expand any substance. By the action of the motor nerves upon the muscular system, the phenomena of animal motion is performed. Through the nerves of sensation the brain is quickly informed by the telegraph, if a wound is being inflicted upon any portion of the body, if disease is intruding itself upon any organ, or if any thing disagreeable or pleasurable is brought in contact with any part of the body. Through the nerves of special sense, the brain is informed by telegraph whether it be light, or dark—whether there be silence, or noise, etc. So we see that our great common Father, and not Professor Morse, was the inventor of telegraphy. To Morse belongs the honor, and it is indeed a great one, of having adapted this same system of intercommunication with the quickness of lightning between villages, states, and nations; a discovery which will eventually unite all mankind in common sympathy and brotherhood.

Most people know that telegraphic operators supply the electricity which they send over the wires, by galvanic batteries, prepared according to the usual processes explained in our school books of Philosophy. But whence is this animo-vital electricity we have been speaking of derived? Well, I will tell you. The principal source is the stomach, that ever-active laboratory. The dissolution of any substance sets free the element commonly called electricity. The food you eat, if digestible, goes through a process of dissolution in your stomach, and as it dissolves, the electricity evolved ascends

through the nerves made for the purpose, to the ash-colored matter of the brain. The vitalizing property of air is mainly electricity, and, consequently, we receive this element by the lungs and pores, from which it is taken up by the blood, and carried to the great receiving reservoir of the brain, which, I may add, accommodates more blood than the fibrous matter of the brain. The blood on entering the ash-colored matter discharges its cargo of electricity and nerve nutriment, and returns to the body for another load.

Fig. 2.



PROF. BRAIN'S TELEGRAPH.

Large quantities of animal electricity are also generated by the alkalies and acids of the animal organism. The mucous membranes, or linings of the cavities, are continually excreting a semi-fluid called alkali, and the serous membranes, or outer coverings of the body, an aqueous or watery fluid, called acid, and according to the testimony of Dr. Bird, if these fluids are so placed as to be connected by parietes of an animal membrane, or a porous diaphragm, a current of electricity is evolved.

Hence, we find that not only are our stomachs generating electricity, but we are inhaling it by our lungs, and our pores, and the external or serous, and internal or mucous surfaces, united as they are by natural parietes and porous diaphragms, are producing it in large quantities. As it is produced, or enters the system, it is so modified as to be made fit for the uses of the body.

The brain is as industriously distributing this vital electricity through the system, as the heart is in circulating the blood, and too

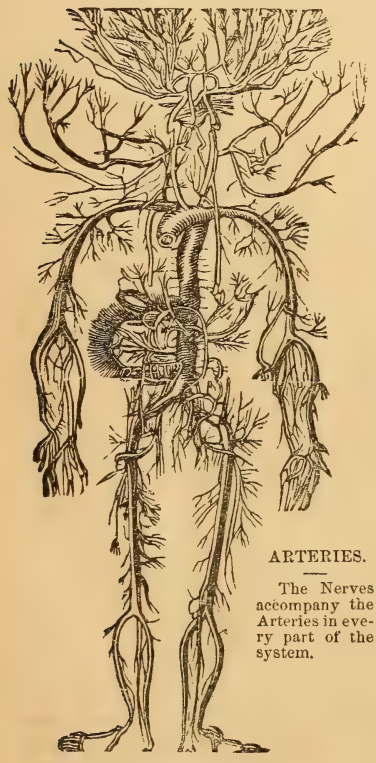
much, or too little, given to any particular organ, produces disease therein. The complete withdrawal of nervo-electricity from any part paralyzes it, so that it has neither sense nor motion. If withdrawn from the motor nerves only, sensation remains, while motion is lost; if from the nerves of sensation only, then motion continues, but sensation is destroyed. If withdrawn from the nerves of special sense, the power of hearing, seeing, smelling, and tasting is lost; or it may be withdrawn from only one set of the nerves of special sense, producing some of the foregoing difficulties, without affecting the other senses. Too little vital electricity given to the liver, renders that organ torpid—too much, causes nervous congestion and inflammation; too little given to the stomach causes nervous dyspepsia—too much makes the appetite voracious, and induces other derangements to the digestive machinery; and hence, we see that to all the organs a proper quantity must be distributed, or disease results.

It is unnecessary to pursue this explanation further to show that the nervous system is a complex piece of machinery, as delicate almost as the spider's web which is spread out over the meadow grasses, and that many diseases arise from a defective nervous system. Those which do not, and which may not come under the exceptions mentioned at the opening of this essay, can be traced to disturbances of the mind, or an abnormal condition of the blood.

From what has already been said, it is apparent to any logical mind that diseases often result from trouble, or depression of mind. So closely allied are the brain and the nervous or telegraphic system, it is impossible for one to be disturbed without exciting the sympathy of the other. The brain, beside being the receiving and distributing reservoir of animal electricity, is the residence of the mind, or the spirit, and this immortal principle controls its action. When, then, any thing occurs to disturb the equanimity of the mind, the brain at once telegraphs the melancholy news over the wires, or nerves, to every organ of the body, and, like a well-regulated and affectionate family, all join in sympathy for the afflictions of the one which they regard as the head and provider. In some cases, when great grief or emotion is present, the brain works so actively in producing intense thought, that it consumes all, or nearly all the vital electricity of its reservoir, and when this bankruptcy takes place, it even withdraws that which it has supplied to the vital organs. When

it reaches this crisis, death results. Emotions of the mind, it is well known, greatly affect the organic secretions, and Dr. Trall does not greatly magnify a fact, when he remarks "that they may be depraved or vitiated as readily by excessive mental emotion, as by a drug-poison taken into the stomach." He continues by saying, that "a paroxysm of anger will render the bile as acrid and irritating as a full dose of calomel; excessive fear will relax the bowels equal to a strong infusion of tobacco; intense grief will arrest the secretions of the gastric juice as effectually as belladonna; and violent rage will make the saliva as poisonous as will a mercurial salivation."

Fig. 3.



ARTERIES.

The Nerves accompany the Arteries in every part of the system.

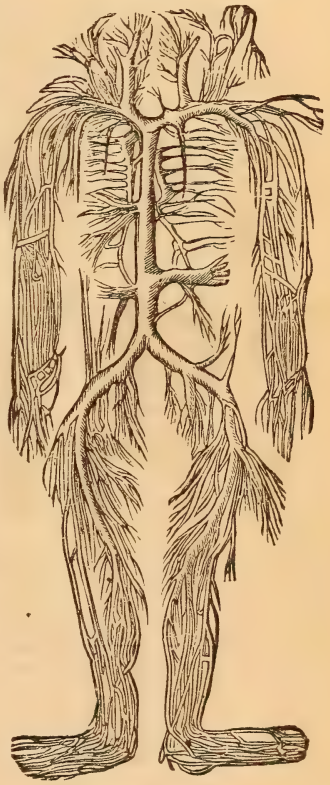
ARTERIAL CIRCULATION.

The arterial system carries out the good vital blood that nourishes the body.

Says Combe: "The influence of the brain on the digestive organs is so direct, that sickness and vomiting are among the earliest symptoms of many affections of the head, and of wounds and injuries to the brain, while violent emotions, intense grief, or sudden bad news, sometimes arrest at once the process of digestion, and produce squeamishness, or loathing of food, although an instant before the appetite was keen. The influence of the mind and brain over the action of the heart and lungs is familiar to every one. The sighing, palpitation, and fainting so often witnessed as consequences of emotions of the mind, are evidences which nobody can resist. Death itself is not a rare result of such excitement in delicately-organized persons."

A story related by the late English author, Eliot Warburton, is interesting in this connection. "A Howadji, or sacred traveler (more given to lectures than to prayers), met the plague coming out of Cairo, and reproached that demon with his murderous work. 'Nay,' said the fiend, 'I have slain but a few; it is true that twenty thousand of the faithful have died, but only one-tenth of them fell by my hand,—the rest were slain by my fellow-demon, FEAR.'"

Fig. 4.



VENOUS CIRCULATION.

The venous system carries back the blood after it has deposited its good properties.

In times of war, the influence of the mind on the health has been many times strikingly exhibited. During the great Civil War between the North and the South, all newspaper readers knew of the fatality attending the Federal "Army of the Potomac," in the Chickahominy swamps. Most people attributed the prevalence of sickness and death among the soldiers, at that time and place, simply to the unwholesome air of the locality, but this was not all. It was a dark day in our country's history; many of our bravest men felt disheartened; and mental depression, if not despair, rendered our country's noble defenders susceptible to malarious influences, and they consequently became ready victims to the unwholesome vapors with which they were enveloped.

The awful fatality which attended the allied armies at the Crimea, was undoubtedly more attributable to bad management on the part of the commanding officers than to inclement weather. The soldiers, having lost confidence in their commanders, became depressed in

spirit they were filled with fearful forebodings; the buoyancy of their nervous system was disturbed, and thereby digestion impaired. Through these discouragements they were made susceptible to disease, and would have been liable to its attacks, however favorable the climate; while a slight unfavorable change in a foreign atmosphere, under such circumstances, would induce fatal results.

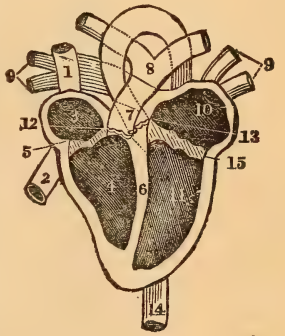
The English press attributed the sudden death of Lord Raglan to the censures heaped upon him at home. Many politicians in this country ascribe the brief illness which ended the career of America's greatest statesman, to disappointment in not receiving the Presidential nomination from a convention of his party.

Thus we see the influence of the mind on the body is generally understood and admitted. But few stop to divine the means by which it is effected. It is well, therefore, to understand that every organ is notified on the telegraphic system, if any thing offends the spirit of the human being, and these organs are often taxed or compelled to give back part of the nervo-electricity with which they are performing their offices. If, through any accident to the limbs, contact with any powerful poison, or impurity of the blood, the harmonious evolution and circulation of the nervo-electric fluid in any part of the body are disturbed, the brain feels the effect, discovers the cause, and faithfully informs all the members of the family, who contribute vital healing forces with which they endeavor to conciliate the difficulty, and if they fail, the whole system is thrown into discord.

Next, I will speak of the blood, for all diseases which do not arise from the causes already named and explained, have their birth in a deranged condition of that almost as mysterious fluid which circulates through the entire system. In plain language, the blood is fluid bone, fluid cartilage, fluid muscle, fluid nerve, and fluid every thing that goes to make up the human body. Technically, it is mainly composed of corpuscles floating in *liquor sanguinis*. These corpuscles are minute bodies, resembling, very nearly, in shape, pieces of coin, as represented in the illustration, Fig. 7. They can only be seen by aid of the microscope. There are two kinds of corpuscles, the red and the white, or colorless. In health, the red predominates in the ratio of three or four hundred to one of the white corpuscle. Hoffman estimates that there are twenty-eight pounds of blood in a man of average size. This fluid is circulated through the system by the heart,

arteries, capillaries, and veins. The heart may be said to be the capitol of the vascular system, as the brain is the capitol of the nervous system. It may also be called the receiving and distributing reservoir of the blood, as the brain is the receiving and distributing reservoir of the nervo-electrical forces. The heart is an incessant worker and a good manager. It pumps vital or arterial blood through the arteries and capillaries to every part of the system, and pumps it back through the veins to itself again, and then pumps it into the lungs, to become revitalized by the oxygen of the air we breathe, from which it again receives it to send it on its recuperative mission. The heart undergoes four thousand contractions per hour; each ventricle is reckoned to contain about one ounce, and therefore, we are brought to the astonishing realization that two hundred and fifty pounds of blood pass through it in that brief space of time. The fleshy parts of the body are filled with what are called capillaries. An Irishman once remarked, that a gun was a hole with iron made around it; well, a capillary is a hole with animal fiber built around it, and there are so many of them that the human system almost resembles a sponge in vascularity. People who are continually drinking something when the thermometer gets into the nineties, must readily comprehend this statement. They are constantly drinking, and the water is constantly running out of them. Their clothing becomes saturated with their perspiration. Into the capillaries, the heart, through the arterial system, pours the life-giving blood, and after it has deposited its vital atoms, and taken up the worn-out ones, the heart sucks it up through the veins to be renewed.

Fig. 5.

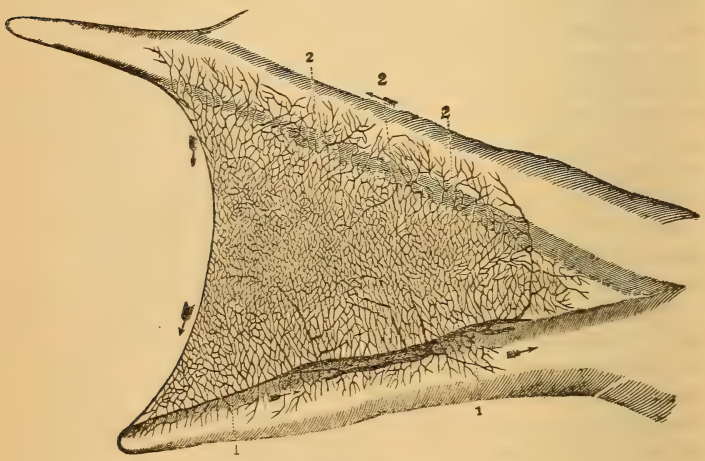


CAPITOL OF THE VASCULAR SYSTEM.

1, The superior vena cava; 2, the inferior vena cava; 3, the right auricle; 4, the right ventricle; 5, the situation of the tricuspid valves; 6, the partition between the two ventricles; 7, the pulmonary artery; 8, the point where it separates and enters the right and left pulmonary artery for the corresponding lungs; 9, the four pulmonary veins bringing the blood into the left auricle; 10, the left auricle; 11, left ventricle; 12, location of mitral valve; 13, location of sigmoid valves of the aorta; 14, the position of the sigmoid valves of the pulmonary artery.

The blood may be said to carry on a coast-wise trade with the various organs and tissues of the body. It goes out freighted with fresh living atoms, and visits every part of the body, even the bones and muscles, and gives that which will repair each part in return for atoms which are no longer useful. These waste matters

Fig. 6.



A FROG'S FOOT.

The Capillaries as seen in the web of a Frog's foot, under the microscope. 1, 1, are the veins, and 2, 2, 2, the arteries.

it carries to the dumping grounds, called the lungs, liver, kidneys, and pores, and these organs empty them out through the channels nature has provided. The heart is the shipper.

I have thus intruded these illustrations to present the whole matter clearly to the mind of the non-professional reader, and I trust I am fully understood. Now then, let us suppose the blood becomes impure, so that the heart has no good arterial fluid to dispense to the various organs. The latter are not only deprived of the nourishing properties of good blood, but are left to counteract, as best they may, its corrupt particles. The vital parts are placed in the position of a man with his hands tied, who is called upon, not only to feed, but defend himself. The result is, the human machinery becomes clogged with poisonous humors. These may

block up the liver so that it can not perform its functions properly, and thereby cause irritation, or inflammation, or they may produce a tubercular affection of that organ. They may attack the lungs, producing pulmonary disease. They may irritate or inflame the lining of the stomach so as to impair digestion, and ultimately induce obstinate dyspepsia. In short, no organ or fibre of the body is safe when they are present. These impurities are more liable to affect a person internally than externally. Many persons suppose if there are no pimples, blotches, ulcers, or tumors on the surface, the blood may be considered pure, no matter how much pain or suffering may be experienced inside of the outer covering. This is an error; for many of the most troublesome affections of the hidden portions of the body are caused by blood impurities. Those who have them on the surface are the most fortunate, for, as a general rule, when the blood possesses strength enough to pitch these troublesome particles out on the surface, it also possesses the ability to protect the internal organs from their corrupting influence.

What I have said in the foregoing relative to the blood, relates rather to *active*, than *latent* impurities. The latter may be defined as those foreign properties in the blood, which, under favorable circumstances, may induce disease. Ordinarily, a person having them is unconscious of their presence. They fellowship with the corpuscles of the blood, as masked hypocrites fellowship with Christians. But let some poisonous gases infest the atmosphere, and they at once, like the secreted burglar, open the doors of the system, coalesce with them, and induce fevers, or difficulties of some kind. I think fevers of all kinds, including scarlet fever and measles, may be traced to latent impurities in the blood. A person could hardly contract small-pox when exposed to it, except for these insidious properties which render the system susceptible. As a female germ can not produce a child without the addition of a male germ, so these latent impure particles in the blood can not generate disease without meeting their affinitive poison. Seed cast on ground not suited to it produces nothing, while simply the pollen blown from some distant field on to just the right quality of soil, seems to meet something equivalent to the ovule, from which vegetation starts up, as if by magic. It is a fact known to many scientific men, that in almost any locality, soil taken from a depth of thirty or forty feet is soon covered with white clover. This can only be accounted for by attrib-

uting to this soil germinal qualities, which, brought in contact with the pollen of the clover carried perhaps miles on the wings of the wind, produce this species of vegetation.

According to the investigations of a Dr. Salisbury, it is quite probable, at least, that fever and ague is produced by some such process as I have endeavored to explain. The following I find in a late number of the American Agriculturalist. "The ague plant has recently been discovered—not the plant that cures ague, but the one that causes it. Here is one plant, at least, that we can notice without being overwhelmed with applications for seed. To be sure, it is a little thing, and takes a good eye, aided by a good microscope, to find it, but when found, it can not be said, 'it is no great shakes,' for it is the genuine shaker seedling itself. Dr. Salisbury, of Ohio, announces in the American Journal of the Medical Sciences, that fever and ague is caused by a minute plant which is found where stagnant water has just dried away. The spores, or reproductive dust of this microscopic plant, are diffused through the night damps, and being taken into the system by breathing, are the cause of that widespread scourge, the ague. The habits of this minute plant completely accord with what was before known of the occurrence of miasm; and that they are the real cause of it has been shown by taking boxes of earth containing them to places where an ague was never known to occur. In about two weeks after the ague plant was taken there, well-marked cases of the disease appeared. The spores only rise in the night, and then to a height, varying with the locality, of from thirty to one hundred feet. This explains why the night air brings on ague, and why elevated localities are free from it. After the ague-seed is taken into the system, the plant is propagated there, and the patient becomes a sort of animated hot-bed." Now, "ague plant," as well as every other plant, must have suitable soil, and it is hardly sensible to suppose that any such soil can be found in pure blood.

It is doubtful if cholera, or yellow fever, can attack those whose blood possesses purity and richness, whether the seeds of those diseases are insects in the air, smaller than any ordinary microscope can discover, as some aver, or simply poisonous gases in the atmosphere. The latent impurities in the blood must be of the right quality to unite with them, and engender those diseases, or a person, however exposed, will escape.

There are other abnormal conditions of blood which can hardly be called impurities, active or latent. For instance, a person may have an insufficient quantity of blood, resulting from which he is weak, pale, and cadaverous. There may be an excessive supply of the white corpuscle, or an insufficient supply of the red corpuscle, producing paleness and lassitude, but not necessarily leanness, as people so affected are often fat. There may be an insufficient supply of the white, or a superabundance of the red, giving undue redness to the skin, and predisposing a person to inflammatory affections and congestions. In short, the blood must possess very nearly that proportion of red and white corpuscles which nature originally instituted, or disease will present itself.

It now having been shown that a free circulation of vital or nervous electricity, an unruffled mind, and good blood are essential to health, it requires only a moderate exercise of common sense to perceive that all diseases, excepting simply those induced by poison or accident, originate from a disturbance of these indispensable conditions. There may exist hereditary organic weaknesses, but even those had their origin in conception, or in fœtal life, from the disturbed mind or vital fountains of the parent, thus not allowing a single exception to my theory.

Fig. 7.

CORPUSCLES OF THE BLOOD.

The corpuscles of the blood as revealed by the microscope—some separate and others piled together like so many pieces of coin.

The attention of the reader will next be directed to the principal causes of nerve and blood derangements, or the *primary* causes of disease. But, before concluding, let me ask the reader if the foregoing does not lead to the irresistible conclusion, that the first duty of a physician to a patient is to see that his nervous system is set right, his mind emancipated from all depressing influences, and his blood restored to that condition which enables it to impart the tint of health to the skin, strength to the muscle, and rich and abundant juices to all the tissues?

CHAPTER II.

THE CAUSES OF NERVOUS DERANGEMENTS AND AFFECTIONS OF THE BLOOD.

THE subject of this chapter opens a boundless field for the investigation of physiologists. Indeed, should an attempt be made to trace out all the influences, immediate and remote, which tend to destroy the mental and nervous equilibrium, and render the blood a fountain of death rather than life, many volumes like this would be filled, and then the task would be unfinished. I shall, therefore, limit myself to an explanation of the principal causes; those over which we have the easiest control. Each shall be treated under its appropriate head, with such variety of matter as may be necessary to make it entertaining, as well as instructive.

Ignorance.

This is the vehicle, loaded down like a city omnibus, or an excursion steamboat, that conveys into the system nearly all the nervous derangements and affections of the blood which afflict the human family. A large proportion of all the evils the essays in this chapter will complain of, really spring from one common root—ignorance. Errors in eating, drinking, sleeping, dressing, ventilation, sexual isolation, sexual association, medicating, &c., the bad habits of childhood, and of adult age, may be traced directly to ignorance. It casts a black shadow over every hearth-stone—it makes a dark corner in every institution of learning—it

Fig. 8.

Trying to lift himself over the fence by the straps of his boots.

clothes with bigotry and intolerance thousands who claim to be the apostles of the Christian religion—and it even revels in the halls of science, putting smoked glasses over the eyes of those we are taught to revere as philosophers and sages—it makes the peoples of all our planet play "blind-man's buff," where, on every side, there are moral and physical pit-holes ready to ingulf them. No one sees his neighbor in his true character, and if he grasps for him, only catches costumes or professions. We are like moles, with only the rudiments of eyes, groping above the ground inhabited by those burrowing beneath. Thank God, we have powers which those little quadrupeds have not, and if we will but place ourselves openly to the light which is ready to shine upon us, if we will be tolerant of each other's opinions, weigh all things, and hold fast that which is good, our posterity, if not we, may behold the brightness of the "good time coming."

There are two kinds of ignorance—*real* and *wilful.* The latter is the outgrowth of the former. No sane person will voluntarily sacrifice health through wilful ignorance, unless that wilful ignorance is plumply backed by some of the genuine article. Like the "Jacobs," "Original Jacobs," and "Real Original Jacobs," they are all Jacobs after all. A person may shut his eyes to a disagreeable truth—resolve within himself that he will not see it, and impatiently trample it under his feet, and yet, did he fully comprehend the consequences, he would desist from his folly. A glutton may overload his stomach, with a full knowledge that he is violating a physical law—knowing that this violation will certainly render him physically uncomfortable. But were he sufficiently informed to have presented clearly to his mind the latent as well as active derangements one such violation engenders; could he but see the innumerable ills which will remotely spring from a cause apparently so slight, is it to be supposed he would sacrifice years of physical comfort for a momentary gratification of a morbid appetite? A thoughtless young woman may dress imprudently to attend a fashionable ball, covering but partially, or leaving completely exposed, portions of her person which she habitually wraps in flannels or furs. She is told of the danger, but laughingly retorts, "I know it, but I am bound to have a good time." This may be attributed to wilful ignorance, but a stratum of real ignorance lies at the bottom of it. She has an imperfect knowledge of how fearfully and wonderfully

she is made, and how one slight physical derangement may lay the foundation for many diseases; to future years of mental and bodily wretchedness; and finally, a premature grave. "A short life, and a merry one!" she gayly ejaculates, without knowing that such a thing is a physical impossibility; but it is, unless she ends her brief hours of frivolity by cutting her throat, or otherwise abruptly terminating her existence in one short moment, for all recklessness leads to mental and physical suffering; and though life may be short under such circumstances, it is always long enough for nature to inflict her penalties; for a person cannot die without disease, or physical infirmity, except by accident or suicide, and when a few days or weeks of reckless hilarity are followed by months of mental and physical distress, even if death does come to the rescue, what becomes of the theory, of "a short life, and a merry one"?

Let the foregoing two instances suffice for an illustration of what is generally called wilful ignorance. We see that this species has its origin in real ignorance, and that a better understanding of the laws of life and health would speedily put an end to recklessness entered upon with but a partial knowledge of the consequences.

Real ignorance is the fearful enemy of mankind. Let us commence at the very beginning of the human being. How many know the essential conditions to bring into the world a healthy child? A man and woman love each other, or think they do, or they do not, but it is expedient to marry, and they do marry. The next thing you hear is, that the wife is pregnant. How did she become so? Accidentally, probably, for nearly all children are the accidents of gratified passion, instead of the products of willing parents who premeditated and prepared themselves for so important a work. Most married people are ignorant of the fact that their own physical conditions at the moment each yields the germ, which is to start into existence a human being, has an everlasting influence upon that being. Many a child has been conceived when its father was lounging about home on account of sickness, and to-day suffers physically, and perhaps mentally, from the effects of that paternal illness. There are thousands of children to-day with disordered nervous and vascular systems, who are so because they were conceived at the "making up" of quarrelsome progenitors. Many a child is the offspring of a rape, perpetrated by a brutal husband

upon an unwilling wife, and this offspring goes through life with a weakly nervous system as a consequence.

Men and women marry, ignorant of the laws of mental and physical adaptation. This botchery of human procreating machinery goes blindly at work turning out babies. The babies do not ask to be born. Life and disease are both thrust upon them. Poor things! The doctors will earn half their bread and butter from these wretched specimens of humanity, if the unfortunates manage to live long enough to earn any thing. The ignorance of parents prior to, or at the moment the embryo of a new being is created, brings forth only the first instalment of disease with which it will have to contend. Here and there a prudent woman may be found who knows to what extent the offspring within her womb is physically influenced by her habits of thought and action. The majority do not. Few men, when treating pregnant women with unkindness, are conscious of the injury they are inflicting upon the miniature human being. The period of utero-life is one fraught with danger to the health of the defenceless little creature, which nestles as shrinkingly within the walls of the uterus before, as it does timidly to its mother's bosom after its birth.

The babe is born! What next? Not one mother of a thousand knows how to rear a child in a way to promote health of nerve and blood. She feeds and clothes it improperly during infancy and childhood; she drugs it almost to death, or lets some doctor do it, for ills proceeding from one or more of the causes already alluded to. Then the child must be vaccinated. How few know the fact that scrofulous, syphilitic, and other impurities are taken from the arms of diseased children, and inoculated into the blood of those who are free from such impurities! The knife of the father, or the needle of the mother, or the aid of a physician with whom the parents are entirely unacquainted, is employed to perform this important operation, when only those combining skill with the greatest integrity, should be trusted. So that, from this source, a new element to corrupt the blood is imparted to the infant. As the child advances in years, a new and strange passion seizes it, often before the proper age of puberty. Ignorant of the complexity and offices of the procreative organs, it falls into bad habits in efforts to gratify the passion, and further nervous and blood derangements ensue. If it be a female, she arrives at the age when menstruation begins, un-

taught regarding this function. She observes the blood issuing from her body, and frightened at its appearance, attempts to stay the flow. I have many times been consulted by pale women suffering from menstrual irregularities, which were induced in childhood, by attempting to arrest the menstrual discharge, by applying cold water, ice, or snow to the parts. Those who do know enough of the function to avoid this error, do not know how necessary prudence is during its performance. In rural districts, the out-houses are often built to project over streams, or they stand on hill-sides, so that draughts of air are continually passing up through them. The best of them in the country are poorly built for the protection of the health, and especially the health of women. Many cases of menstrual irregularities, particularly in those who have but just commenced the performance of the function, may be traced to exposures in badly constructed places of this kind. Keeping the feet dry, and the bosoms from sudden changes of temperature, when they have been made sensitive, and susceptible to disease by excessive dress, are precautions too often neglected. In some cases too little, and in others, too much, exercise is indulged in during the menstrual flow.

The coyness of young people of both sexes, but especially of young women, in attending to the "calls of nature," are also fruitful sources of nervous and blood derangements. Children are brought up to regard the necessary attentions to the bladder and bowels as something so indelicate as to require the greatest privacy, so much so, that if places constructed for such purposes are not entirely shielded from observation, a young man, or a young woman, will go all day, or possibly for several days, without attending to two very important functions. The results are, the blood becomes poisoned by the retention and absorption of waste matters, the nervous energies of the liver, bowels, kidneys, and bladder, become paralyzed, and if the victim be a female, the pressure of water in the bladder in front, of the excrementitious matters of the bowels above and behind, displaces that sensitive organ, the womb, and then follow all sorts of ills to make life wretched. What kind of etiquette is this which teaches people to be ashamed of the functions an All-wise Creator has instituted to preserve and keep active the most complex machinery ever made by His hand? Is it indeed a disagreeable task, one we are to be ashamed of, to dispose of the useless portions of the liquids and solids we have put into our mouths? May we not better

teach our children to be ashamed of gluttony—of besmearing their mouths with vile tobacco, and loading their breath with the vapors of unwholesome drinks? May we not better place a gate at the door wherein so much that is injurious enters, than to stop up the outlets from which many things purer depart! Especially when absent from home, among people they have never seen before, and may never see again, are coyish young people—and some old ones—foolish in this particular; and because appropriate places for physical relief cannot be entered without observation, irregularities are inaugurated which finally bring them to their beds, and their doctors. People in advanced life, unless sorely afflicted with mock modesty, are usually more sensible in regard to this matter, and still, they are not sensible enough for their own good, nor have they a particle of sense, in many instances, in giving right impressions to their children.

Grown-up children know too little of themselves to instruct those who come after them. Mothers, who have the care of children, and who should, consequently, possess all attainable information regarding the human system and its wants, often know the least. Picture to your imagination women, well-informed on most subjects, bearing in educated circles the reputation of being intelligent, calling on a physician, and trembling with anxiety on account of a tumor they had discovered, from which they apprehended the most painful consequences. An examination is made, and what they regard as a tumor, is found to be simply the neck of the womb, in a perfectly healthy condition, and in the place our Maker assigned for it! Such instances have occurred in my practice. One young married woman, of unquestionable popular intelligence, consulted me concerning a supposed cancer. Her mind was terribly exercised about it, and she hoped her case was not incurable. On examination, the cancer proved to be simply the clitoris, although somewhat inflamed by her frequent manipulations after she first discovered it. At the outset, it was only the natural organ such as is found in all healthy women; but she could not let it alone when she discovered it, thinking she "must do something for it," and the growing irritation resulting from her attentions to the supposed cancer, she attributed to the progress of the disease. Women have consulted me who supposed leucorrhœa was simply a natural and healthy discharge. With such ignorance on the part of mothers, especially when they are so thoroughly saturated with fashionable social non-

sense, we can hope for little improvement in children. We must look to schools, ultimately, for our physical redemption, and if proper means will be adopted by those having charge of our institutions of learning, great things may be effected in one generation. In the chapter headed "The Prevention of Disease," I shall make some suggestions which should be pursued in all places where young people are taught. In a country like ours, so full of school-houses, ignorance in reference to vital matters pertaining to physical life, would be utterly inexcusable, if the right course were adopted by our boards of education, and school committees.

I will now conclude this essay with the remark that much that will appear in subsequent pages might be embodied under this head, for ignorance lies at the bottom of all bad habits and usages. But under separate heads can be given greater prominence to many things to which I wish to call especial attention.

Violating the Moral Nature.

Many people have an idea that if they pay fair respect to what are usually understood as physical laws, all will go well with them so far as bodily health is concerned. But few seem to understand the sympathy existing between the moral and physical man. If an individual, to-day, has sufficient physical strength and endurance to suppress the voice of the inward monitor—the conscience—and retire at night with a relish for sleep, after he has perpetrated some great moral wrong, he imagines he will always be equally successful in crushing out his better nature. But if no other cause intervenes to render his nervous system, and hence his mind, wretchedly sensitive to all such violations, the effort required to put down conscience will, in time, do it, and all at once he will find himself plunged into a mental hell, from which and into the sulphurous one pictured by ancient theologians, would be a grateful deliverance. We cannot persistently do those things which we feel to be wrong,

Fig. 9.

A man who has nearly worn himself out in the service of the devil.

without wearing away (by slow degrees, perhaps, in some cases), the nervous strength which, to-day, sustains us in violations of our moral sense. If, by a dishonorable course of life, a man may have attained wealth, and that wealth has given him position, and during all this time he has managed to preserve a fair degree of health—possibly excellent health—the loss of property, and of position attained through it, brings him to his reflections, and the doctors have no easy task to cure him of ills which almost surely overtake him. Then, if not before, the voice of conscience, which has been contumaciously suppressed, keeps him awake at night-time, for the lessons which should have been received from day to day for years, are crowded upon him in one moment, and hypnotics and anodynes are of no avail in bringing sleep to his eyelids, and repose to his agitated nervous system. Nor is it sufficient that the moral nature be simply preserved, in order to make a man strong and noble. It must be built up. As physical exercise develops the muscle, so exercise of the moral faculties develops the moral strength of the man, and this moral strength makes him mentally buoyant, courageous, and happy; and this condition of mind promotes digestion, gives regular pulsation to the heart, action to the liver and kidneys, full and deep respiration, and muscular life and elasticity.

It is not necessary that a man should do as his conscientious neighbor, or as society dictates. So long as mankind are not run in one mould, there will be diversity of opinion, and each man will form, from investigation and reflection, a moral standard, considerably his own, or at least modified by his individuality. It is not what others say of us individually, or what people of other nationalities say of our nation, that will make us great, powerful, and happy. It is what we can *feel* regarding ourselves; it is the self-respect which a noble life creates; if our consciences can unequivocally pronounce the verdict—RIGHT—we are at once invincible—we are happy—we are healthy. The applause of others may tickle our vanity, at the moment we think it misapplied; but the applause of conscience sinks a shaft of moral strength, an unfathomable pleasure, down into the very soul's centre.

It does not simply dwarf a man morally to devote his entire energies to the accumulation of wealth, or the attainment of some other selfish object. It changes his physiognomy, or at least prevents it from acquiring a look of nobleness. An individual may not be

legally dishonorable, while straining every nerve for the accomplishment of a selfish purpose, but the simple neglect of his moral nature makes him less a man, not only in a moral but in a physical sense. The nervous stimulus, or life force, has been consumed for the realization of the one object of his ambition, and the various organs of the body have been cheated of that which belonged, in part, to them, so that a dwarfed soul looks out of a body which has not been healthfully developed. He may not be a shrunken man physically, he may be fat—plump as an alderman; if so, much of the vital forces he wastes in his aggrandizement, are needed to spiritualize this gross corporeity. Have you never noticed how much difference there is in the physical appearance of a good fat man, and a fat man who has neglected his moral development? From the former, the soul shines out like a light from a window; the latter has no more spiritual radiancy than the wax figure of a sixpenny showman. So that sins of omission, as well as of commission, against the moral nature, affect the physical well-being.

There is no one way, perhaps, in which the moral man is more tortured than in the pursuit of wealth and position. In fact, this part of man's nature is often sacrificed entirely for the realization of these objects in our competitive world. Henry Ward Beecher, in one of his sermons, presented something interesting in this connection. "Did you ever," he asks, "see men made in this world? They had no great wisdom; they had no great honor; they had no great heroism; they had no great patience; they had no great meekness; they had no great wealth of love; but they had a certain muck wisdom; they knew how to thrust their hands in where dirt was to be moulded; they knew how to amass property; they knew how to construct ships and houses; they had a kind of ferreting eye, a sort of weasel sagacity; they were keen and sharp; they were said to be prosperous, thriving men; they were being built up according to the estimation of men. Give a man five thousand dollars, and you have laid the foundation on which to build him—you have got his feet built; give him ten thousand, and you have built him up to the knees; give him twenty-five thousand, and you have built him to the loins; give him a hundred thousand, and you have built him above the heart; give him two hundred thousand, and he is made all over. Two hundred thousand dollars will build a man in this world; two hundred and fifty thousand will make a good deal of a man; five hundred thou-

sand makes a splendid fellow, as the world goes. The great trouble, however, is that although the materials may not be very costly, as God looks upon them, men find it difficult to build themselves in this way. Besides, they are very easily unbuilt. Where a man is merely what he owns, it does not take long to annihilate him. You can take a man's head off with a hundred thousand dollars; you can cut him in two with two hundred and fifty thousand; you can annihilate him with a kick of five hundred thousand, so that there would be nothing left of him but smoke!

"There are thousands of thousands of men, of whom, if you take away their houses, and ships, and lands, and fiscal skill, and such other qualities belonging to them as they will not want in Heaven, and cannot carry to Heaven, there will not be enough left to represent them there of righteousness, and godliness, and faith, and love, and patience, and meekness, and such like qualities. They have used all these qualities up for fuel for their machine. It has been their business in life to sacrifice probity that they might be rich; that they might gain power and influence; that they might make their hold on the world broader and stronger; and if they cannot carry forth these things which have been the objects to the attainment of which they had devoted all their energies, what is left for them to go out of life with? You see not only single specimens, but whole ranks of the dwarfed, insect class of men, patting each other on the shoulder, registering each other, and speaking of each other as 'our first men,' 'our largest men,' 'our influential men,' 'our strong men;' and yet, if you were to take away from them that of which the grave will divest them, you could not find them even with a microscope!

"Do you not know just such men? If you were to think of those belonging to your own circle of acquaintance, and ask, not what this and that man are worth as factors in material things, but what they are worth as God looks upon them, what they are worth when measured by their righteousness, and faith, and love, and patience, and meekness, those things which are to make up our manhood in the eternal world, would you not find among them those of whom, if their selfishness, their heartlessness, their grasping skill, their worldly wisdom were taken from them, there would be scarcely any thing left?"

It often happens that such men—men who, instead of making great names by pursuing some moral or beneficent object, simply

write their names on checks, business receipts, carve them out on trees, pencil them out on barns, on walls, and on the rude partitions of summer resorts—awaken to a consciousness of their moral impoverishment after they become somewhat sated with wealth and petty enjoyments; and then there is a summary precipitation; a breakdown of energy, of pride, of ambition, of appreciation of what they have attained, and so much disappointment and mental wretchedness, that health fails, and oh, how hard it is with hygiene, with tonics, with therapeutical electricity, with every means science and skill has discovered, to build up such men! They are the worst physical wrecks that enter a doctor's office; and although they say they would give all they possess for physical health and mental quietude, they cling tenaciously to the gold they have so long worshipped. How can they afford to part with it? All their generosity, all their love of humanity, all their love of God, and every good quality they brought into the world with them, have been melted into the glittering lump.

Although, as before remarked, there is a greater tendency to sacrifice the moral nature in the pursuit of wealth and position in this world of pride and competition than in any other way, there is a manifest carelessness in regard to the preservation and development of the spark of the divinity within us in every department of life. Few men and women, comparatively, are fully truthful. Few treat their neighbors with exact justice; too many sacrifice peace of mind for momentary pleasure; thousands are daily and hourly doing what they *know* to be wrong. After all this violation of the moral sense come self-accusation, remorse, wretchedness, loss of sleep, loss of nervous vivacity and strength, and finally the whole system becomes more or less affected by the committal of sins for which punishment is only looked for beyond the present life, when it is hoped an escape may be effected through atonement and the grace of God. Present chastisements are overlooked, or attributed to other causes. People are often ill without knowing the cause, when, if they would turn their eyes inward and examine themselves searchingly, they would find that their physical discomforts arose from discords and inharmonies resulting from doing injustice to a neighbor, for wantonly letting slip a glorious opportunity to make some one happy.

Nations, as well as individuals, suffer from wrong-doing. Governments convulse and cripple their power, and shatter their *constitu-*

tions by acts of injustice. It seems to me that nothing can be surer to end in discord, war, and bloodshed than despotism. Let any body of organized men prevent some other men from enjoying the privileges they arrogate to themselves, what more natural than for those oppressed men to conspire for the assassination, or, at least, overthrow of their oppressors? What can be a more dangerous element in one people than the existence among them of another people, who, for some reason not founded upon justice, are denounced as not so good, not so intelligent, not so capable in any sense, and for which they are denied privileges in the pursuit of happiness which their more powerful neighbors maintain for themselves? Can we reasonably hope to outlive conspiracy, war, and bloodshed, till we take our neighbor by the hand rather than by the throat? Considering the prevalence of conceit in this world, are any of you quite sure you are any better or more intelligent than the man you are holding your foot upon? and if so, is it not clearly your duty to take your foot off, give him a helping hand, and the widest opportunities and incentives for culture? Would it not be better to devote the money you are paying the soldier or policeman to keep him in vassalage, to his education and elevation? If, to-day, every ruler on our planet were making it the one great aim of his life to give equal religious, political, and social rights to all people; if oppressions were lifted from the hearts and shoulders of all God's children, if every individual would see his neighbor's rights as clearly as he discerns his own, the clash of arms on the battle-field between contending nationalities, the voice of intolerance between differing religionists, disputes in questions of law, the mutterings of men in petty strife, would all be swallowed up in one grand millennium of happiness and kindly feeling, which would go far toward promoting individual health and national greatness. This, you may say, is an ideal picture, and cannot be realized, but self-improvement will do it. If each one of us will bestow a portion of that labor and criticism upon ourselves which we put forth professedly to improve our neighbors, the object aimed at in time will be accomplished. Nations are made up of individuals, and consequently, it is only necessary that every person know how much his own health and happiness depends upon that of his neighbor, and set himself about making himself more just, more truthful, more tolerant, to make society, nation, and government what each should be. We are too apt to say, our neighbor will not adopt the

Golden Rule, and that, therefore, we will not. This is mainly the reason why a better condition of things is not attained. Every one is waiting for another. Let every one who feels the first impulse toward self-reformation, inaugurate the work at once. If none of his neighbors do, he will find a full compensation in the spiritual and physical benefits that accrue to himself, and if he suffers from injustice from others, he certainly does not suffer from injustice to himself. One thousand such men scattered over the world in one generation, would become ten thousand in the next, and might in a few generations be counted by millions? Why hesitate because such a work cannot be accomplished in our lifetime? Because of the disposition of men to wait for each other in undertaking the work of self-improvement, the world is now filled with dishonorable retaliation. I will relate an instance in point. Standing at the counter of a tradesman, while the latter was telling a customer what a smart trick he had perpetrated upon some one who had cheated him, I was witness to the narration of the dishonorable feat, during which narration his eyes sparkled with revengeful delight. He concluded with the triumphant interrogatory, "Didn't I serve him right?" This seemed as much directed to me as to my fellow-customer, and I felt morally bound to respond, when the following colloquy ensued.

Fig. 10.

GODDESS OF JUSTICE.

"I don't think you did."

TRADESMAN.—"Well, I do, for he is the biggest scoundrel in the city; and I always like to get the start of such men. He is always looking out for a smart game of grab."

"But of whom are dishonorable people to learn lessons of honesty, if every one who is defrauded by them, retaliates when opportunity offers?"

TRADESMAN.—"That is all very nice, but I am not the man to let a good chance slip to get even with the fellow who comes a big thing on me."

"Well, then, you are only confirming the usual opinion of dishonorable men, that 'all men are dishonest,' and your retaliation on him will lead him, when opportunity presents, to again retaliate on you, and so on indefinitely, till death ends the warfare. Perhaps if you had reminded him of the chance presented to 'get even with him,' and spurned it as something you could not stoop to, it would have aroused the sleeping sense of honor within him; but, if not, he could not justify his course of rascality with the reflection that he was as good as other men, for he would have, for once, at least, met, in a business way, one man who was above both petty revenge and dishonesty. In my opinion, sir, you missed a golden opportunity to do a neighbor good."

The colloquy ended with a muttering response, which was not quite audible, but the tradesman, after all, was only practising a pretty well-established commercial code. Even when money is not an object, so dominant is the passion for revenge, business men often play financial tricks on their fellows, simply to "pay them off in their own coin," for some previous transaction of a similar kind, in which they were the victims. With this spirit of retaliation in the commercial world, where is fraud to end?

There is no one passion so dwarfing to man's moral growth, and, consequently, to his perfect physical development, as revenge. It whittles his soul right down to a pointed poisoned arrow, with which he is ever ready to pierce his offending neighbor. It plants in his eye an expression as fierce as the serpent's tongue; it shrinks the muscles of his face, and gives his lower jaw an unseemly protrusion; it makes him a stockholder in "hell upon earth," and his neighbors unwilling sharers in the dividends. A revengeful man has that within him which destroys all capability of self-happiness, and all comfort to those who are compelled to come in contact with him.

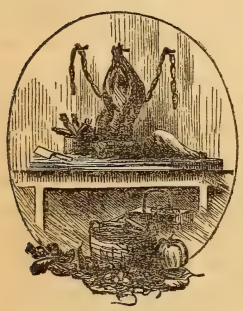
Perhaps it is something that many have not thought of, but it will be found, on experiment, that nothing pays better, physically, as well as morally, than the cultivation of the moral nature. One gets his pay as he goes along. As remarked before, he is recompensed in a happier mind, and better physical health, and there are those coming after him whose happiness should be considered as important as his own, and the labor to promote which will make his soul larger, his nervous system more harmonious, his blood richer, and his muscles stronger, for is it not apparent in the light

of this essay, that a peaceful, just, generous mind, and a clear conscience, strengthen the whole animal organism?

The Food we Eat.

Considering the fact that man by habit is omnivorous, and almost as much so as the pig, and that he eats about eight hundred pounds of food, exclusive of fluids, annually, it ought to surprise no one when I say that many derangements of the blood arise from the use of improper food. Look how directly the food goes to the stomach. It is taken into the mouth and masticated, into the stomach and digested, and then passes down into the lower stomach, where it meets the pancreatic fluids, and is sucked up into a duct, and carried directly into the blood at the angle formed by the great jugular vein on the left side of the neck, and the principal vein of the left arm. Then see how directly it goes to the manufacture of bone, muscle, nerve, &c. Oliver Wendell Holmes, in the *North American Review*, has presented this change very happily. "If," he says, "the reader of this paper live another year, his self-conscious principle will have migrated from its present tenement to another, the raw materials even of which are not yet put together. A portion of that body of his which is to be, will ripen in the corn of his next harvest. Another portion of his future person he will purchase, or others will purchase for him, headed up in the form of certain barrels of potatoes. A third fraction is yet to be gathered in the Southern rice-field. The limbs with which he is then to walk will be clad with flesh borrowed from the tenants of many stalls and pastures, now unconscious of their doom. The very organ of speech, with which he is to talk so wisely, plead so eloquently, or speak so effectively, must first serve his humble brethren to bleat, to bellow, and for all the varied utterance of bristled or feathered barn-yard life. His bones themselves are, to a great extent, *in posse*, and not *in esse*. A bag of phosphate of lime which he has ordered from Professor Mapes for his grounds, contains a large part of that which is to be

Fig. 11.



THE MARKET.

his skeleton, and more than all this, by far the greater part of his body is nothing after all but water, and the main substance of his scattered members is to be looked for in the reservoir, in the running streams, at the bottom of the well, in the clouds that float over his head, or diffused among them all."

The rapidity with which the food of to-day is incorporated into the body of to-morrow, should make us prudent in what we eat, if we would preserve our blood from impurity, and the atoms composing our bodies from disease. How prudent the human family is, may be seen by sitting at the tables of various peoples, civilized and barbarous. At home we are treated to all sorts of mixed dishes, seasoned with condiments, and saturated with the oleaginous juices of swine. Few of us stop to reflect that there may be as much antagonism in the stomach between the various kinds of flesh taken into it, as exists in the living world between the living bodies whose flesh we eat. A fashionable dinner comprises about three courses of different animal food; in some cases turtle soup, then fish of some kind, then roast beef or turkey, with side dishes of mutton or lamb, veal or pork, etc. It cannot, perhaps, be demonstrated, but is it not reasonable to suppose, that each one of these meats possess a latent magnetism, as individual in its character as when animated by life. If so, the stomachs of some people have, every day, to conciliate and make up a happy family of a great diversity of magnetic elements. To live fashionably is to live improperly.

Now let us step intrusively into the kitchens of our neighbors. John Chinaman feasts his stomach on cats, dogs, wharf-rats, sea-slugs, sharks, bats, and caterpillar soup. Australians, and many other people, eat snakes, kangaroo-rats, mice, maggots, etc. The Japanese prefer green peaches, apricots, and plums, to ripe ones, as an offset, I suppose, to our eating green cucumbers. A traveler among the Indians of the Rocky Mountains, or a guest of the people of Zanzibar, will smack his astonished lips over puppy stew, without knowing what it is made of. One who visits Africa, may have a plate of tender young monkey; while the people of the Arctics treat their visitors to a diet of putrid seal's flesh, putrid whale's tail, reindeer's chyle, train oil, whale's skin, and partially hatched eggs. The native of Surinam eats toads, and the Hottentot considers roasted caterpillars to be savory as sugared cream. Frogs are eaten by the French, by the Chinese, and by many people in both

Europe and America. The French have lately taken to eating snails, having found their flavor superior to that of frogs. One hundred thousand are daily supplied to Paris by Burgundy and Champagne alone. On the Maguey plant in Mexico, a large yellow worm thrives, which the native Indian eats, and calls the dish Maguey butter. A *Tribune* correspondent is responsible for the statement that Emperor Maximilian was induced to try it. In brief, among the many strange things used as food, not already mentioned, may be named: elephant, hippopotamus, giraffe, zebra, antelope, wild ants, leopard, lion, alligator, crocodile, eggs of reptiles, lizard, wild-cat, panther, wolf, opossum, musk-rat, rat's brains, porcupine, bird's nest, locust, grasshopper, spider, and nearly every insect; and the Chinamen are so given to domestic economy as to eat the chrysalis of the silk-worm after the cocoon has been wound off. In New York, the testicles of young animals are considered a dish for an epicure by many citizens. Charles Louis Napoleon Achille Murat, son of the great French general, who spent the closing years of his life in Florida, and who had tried all sorts of eating, declared as follows:—

"Horse-flesh, good—dog, fox, and cat, only middling—skunk, tolerably good—hawk, first-rate—crow, second-rate—pigeon, jay-bird, and blackbird, tolerable, and" he added, "though I have no prepossession, buzzard is not good."

Now, nearly all the foregoing animals, insects, etc., contain the true constituents of food, and many of them are not unwholesome. Some indeed which seem revolting to an educated taste, are better and purer for aliment than others which we regard as above criticism. To sustain life, we simply need food which possesses saccharine, oleaginous, albuminous, and gelatinous properties, combined with a proper admixture of salt, sulphur, iron, lime, and phosphorus. But what we should do is to avoid food which, possessing all the necessary alimentary elements, is also tainted by disease.

One of the most common causes of blood impurities is the use of pork. It has been said that all things were created for some wise purpose. This is undoubtedly true, but hogs were never made to eat.

We read that Christ used them to drown devils; they can never be appropriated to a more beneficent use. As an article of diet, pork exerts a most pernicious influence on the blood, overloading it with carbonic acid gas, and filling it with scrofula. The hog is not a

healthy animal. From its birth it is an inveterate gormandizer, and to satisfy its eternal cravings for food, every thing in field or gutter, however filthy, finds lodgment in its capacious stomach. It eats filth and wallows in its filth, and is itself but a living mass of filth. When, therefore, it is remembered that all our limbs and organs

Fig. 12.

THE USE OF SWINE.

"And when they were come out, they [the devils] went into the herd of swine: and, be hold, the whole herd of swine ran violently down a steep place into the sea, and perished in the waters."—*St. Matthew*, 8th chap., 32d verse.

have been picked up from our plates—that our bodies are made up of the things we have eaten—what pork-eater will felicitate himself with the reflection, that, according to physiological teachings, he is physically *part hog*. "We have been served up at the table many times over. Every individual is literally a mass of vivified viands; he is an epitome of innumerable meals; he has dined upon himself,

supped upon himself, and in fact—paradoxical as it may appear—has again and again leaped down his own throat."

From the earliest history of swine, they have been regarded as more subject to scrofula than any other animal. This disease, so peculiar to the hog, before it received a name, so far ante-dated the same disease in the human family, that when it did make its appearance in the latter, it was named after the Greek name of swine, as best expressing its character. There are various diseases peculiar to certain animals. Cats are subject to fits; dogs more than other animals, to hydrophobia; horses to glanders and heaves; the cow to consumption and hollow-horn; sheep to the rot; fowls to the gapes, swelled head, and blindness; and scrofula is the prevailing disease among swine. The diseases affecting other animals than swine, are usually such as to condemn them before they reach the shambles of the butcher; and the law treats with severity all venders of diseased meats, with the exception of pork dealers. This is partly because the scrofula of the hog cannot always be readily detected, and in a measure owing to the indifference of pork-eaters to the known presence of tubercles, tumors, etc., in pork. When man comes to be affected with hollow-horn and rot, beef and mutton must be more closely looked to! To what extent the flesh of various animals may be affected by the diseases to which they are subject can hardly be determined, but Professor Gamgee affirms "that one-fifth of the common meat of Great Britain—beef, veal, mutton and lamb—is diseased; while Professor Gerlach states that in Berlin at least as much diseased as healthy meat is consumed." It is apparent, however, that when scrofula may be communicated simply by habitual contact with a scrofulous person, the contact of scrofulous food with the mouth and stomach must inevitably inoculate the system of the imprudent eater. One fact regarding pork is well known to all physiologists. It is, with few exceptions, the most indigestible food that can be taken into the stomach.

Again, pork is charged with being wormy. It killed a great many persons in Germany, and not a few in other countries, including our own. Our consul, at Elsinore, wrote our Secretary of State all about it, and scientists, on both sides of the Atlantic, got out their microscopes, rubbed up their spectacles, and after examining the flesh of the arraigned porker, found he possessed imps of probably the same devils which were cast into his progenitors on the hill-side. The

illustrations in Figs. 13 and 14, show how these fellows appear under the microscope. They are called Trichinæ, and the disease they produce in man is denominated *Trichiniasis*. The parasites are so minute that they can make their way to any part of the system, and a writer who has witnessed their effects thus describes them:—

"This perforation of parts by millions of microscopic worms, is attended with symptoms more or less violent, depending upon their numbers, and the strength and health of the victim. While passing the coats of the bowels, violent purging often arises, simulating arsenical poisoning, and many persons have been unjustly suspected of this crime, when persons eating food prepared for them have been thus alarmingly seized. As the worms make their way into the muscle, pains like those of rheumatism, cramp, weakness, or entire loss of power, resembling paralysis ensue; and when the numbers of Trichinæ are large, wasting, exhaustion, and death follow. Persons escaping with a few of these disagreeable tenants, suffer in a smaller degree from similar symptoms, but gradually recover, and a small portion of their muscles, removed and magnified, reveal the Trichinæ arrived at their destination, and undergoing the various stages of calcareous encystment."

Trichiniasis took the form of an epidemic in some parts of Germany, in 1865, and handled a great many people on this side of the Atlantic very roughly. Cases occurred in this city, in portions of Pennsylvania, and extensively in the West, where the hog enters so largely into the diet of the people. A scientific investigating committee in Chicago, reported having found in twelve hundred hogs slaughtered, one in fifty-eight affected with a parasite; and the advice of that committee was, that in cooking pork the Trichinæ be thoroughly cooked to death! 160° Fahrenheit was thought sufficient to do this. (Cooked Trichinæ ought to be as good as the Hottentot's toasted caterpillar!) Other investigators contend that pork-eaters consume eighteen thousand of these microscopic parasites to every cubic inch of affected pork taken into the stomach, and that ten out of every fifty hogs are so affected, to which a newspaper facetiously responds:—"If it be true that ten out of every fifty Western hogs are Trichinous when only four out of one hundred are so in Germany, where people are dying with Trichiniasis as with a pestilence, the cholera is nothing to apprehend beside this pork evil. To be eating microscopic worms by the million is no joking matter, even to the

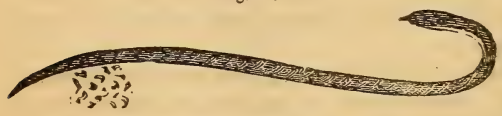
million who have to pay a big price for such food; but if a million of worms are, in turn, to eat us—if they are to eat us *into* the grave, beside leaving others to eat us *in* it—the joke becomes entirely too opaque for satisfactory appreciation."

The discovery of the Trichinæ and the fatality attending its transmission to the human system in many cases resulted in an excited controversy between pork lovers and pork haters. At a meeting of the Berlin Butchers' Association, a medical professor set forth the best means to avoid the spread of Trichiniasis, and was followed by a veterinary surgeon, Dr. Urban, who denounced the whole excitement as unfounded, and offered to eat any amount of Trichinized pork; but when a slice of pork affected with the parasite was offered him, he was taken aback. It is reported that he declined, "but the jeers of the meeting having touched him, he took a little nibble at the proffered slice, and hurriedly left the room. He proceeded to a neighboring chemist, and administered to himself so violent an emetic that the learned doctor's friends need labor under no apprehensions as to his safety." Still there seemed to be those who, while admitting the existence of the parasite in pork, claim that it is entirely harmless if the pork be thoroughly cooked. It is undoubtedly true that the epidemic character of Trichiniasis in Germany, proceeded from the habit of the people of eating *raw* pork, ham, and sausage. My own opinion is that Trichinæ are not liable to revive in the human system after a cooking, unless there are impurities to nourish them, and favor their resuscitation and reproduction. The reason they affect the hog so extensively, is because he is an unclean beast. The same parasite has been found to some extent in other animals, such as the rabbit and cat.

Fig. 13.

MALE TRICHINA.

Fig. 14.



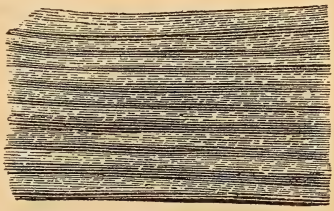
FEMALE TRICHINA AND HER YOUNG.

Fig. 15.

FREE TRICHINÆ.

If a man be scrofulous, or have other impure affections of the blood, the Trichinæ are liable to be resuscitated and reproduced in the system, no matter how much they may be toasted, short of absolute scorching. Maggots only thrive in corruption, and when they get into a wound, confine their operations to the diseased tissue. So I confidently believe it is with the Trichinæ; they only have an affinity for such people as contain inflamed or corrupt blood, in which the health of the muscular fibre is involved, and, perhaps, such are the bad habits of the human family, and so prevalent the disease of the fluids, any person, however healthy apparently, may be likely to be attacked with Trichiniasis if pork, or ham, containing the parasite, be eaten raw.

Fig. 16.



INFECTED MUSCLE.

If it be urged that there are animalculæ in water, vegetables, and every thing we eat, when viewed through the microscope, then I reply that those contained in water and vegetable matter are readily destroyed as soon as they come in contact with the gastric juices of the stomach, while parasites existing in the flesh of animals are not thus destroyed. Experiments have demonstrated that the eggs of the latter may be even dried and cooked without destroying their life, and that taken into the stomach in this condition, they go through the process of incubation almost as readily as if they had not been cooked or dried. The animalculæ of water and of vegetables have no such tenacity to life. The mildest of acid or alkaline solutions will destroy them.

It is not improbable that Trichinæ, after entering the stomach, are sometimes transformed into other worms. It has been contended that the tape-worm only troubles those who eat pork; and further, that the Hebrews, who do not eat the flesh of swine, are never troubled with this parasite; that dogs, fed to any extent on pork, are subject to it; and that experiments on a condemned criminal, made by M. Kuchenmeister, of Zittoria, "with great professional care and minuteness of detail, have established the fact beyond contradiction, that an exclusively pork diet will produce tape-worm."

The foregoing remarks have been made with reference to the best

class of swine; but what shall I say, when I come to speak of those fattened in distilleries! I have seen droves of these inflated creatures driven to the slaughter-houses in Cincinnati. A herd of diseased, bloated, besotted men would not be more sickening to the refined spectator. The hair of these creatures is invariably thin and scattered, and the skin looks like that of a confirmed inebriate. Some have tumors varying in size from a small apple to a good-sized cabbage. I have been told by Cincinnati butchers that tumors are not unfrequently found inside the meat, and that, when laid open by the knife, purulent matter is emitted; but these diseased and bloated carcasses are raised to sell, and, for shame be it said, form one of the most common articles of food in our large cities. Many a pork-eater has been cured of his partiality for "spare-rib," "pigs' feet," "head-cheese," and "souse," by visiting the slaughter-houses of the great "Porkopolis" of America.

Some years ago, a gentleman living near the town of Rockingham, Virginia, lost five head of young cattle and several milch cows, by permitting them to run in the same lot where his hogs were feeding. The hogs ate the stalks of corn, or rather chewed them, and left them on the ground. These were taken up by the cattle, eaten and swallowed. Soon they were taken with an itching all over, and commenced rubbing their heads; their throats swelled, and in a short time death ensued! Their disease might be termed an acute attack of scrofula, with which they became infected from the virus communicated to the stalks by the dirty swine. Still, the flesh of these animals is regarded as a healthy and relishable article of food by a large majority of civilized mankind! Ugh! Let us not upbraid the barbarian who eats snails and lizards, or the Mexican Indian who eats butter made from the maguey worms, for their disgusting epicurean eccentricities, while civilization tolerates hog-eating. It is related of Dr. Adam Clark, that he had a strong aversion to pork, and that on an occasion, when called upon to say grace at dinner, where the principal dish was roast pig, he said: "O Lord! if Thou canst bless under the Gospel what Thou didst curse under the law, bless this pig."

It has been said that no animal was ever created which had an inherent proclivity to disease. This may be true; but some animals, from their earliest history, have been diseased; and none in the animal kingdom better illustrate this proposition than man and hog. And while I am firmly convinced that mankind are injured by eating

hog, I am equally disposed to believe the hog, if a healthy animal to-day, would in time become diseased by eating man. Both man and hog are intemperate eaters, and addicted to filthy habits. As for the latter, he is such a proverbial gormand, that no word in the

Fig. 17.

THE UNHEALTHY PAIR.

English language so strongly portrays a voracious appetite as the term *hoggish*. Then his eating propensities are ever encouraged by the pork-raiser, who wishes to make every carcass as heavy as possible. Many farmers and other pork producers put their pigs in close pens, to prevent their exercising and running off their fat, and in these close, filthy quarters, the grunters are systematically stuffed till they can hardly open their eyes. What would become of a human being so treated? Could a man be so confined and fed, and not become a diseased and bloated carcass? It is equal to a fashion they have in Germany, of putting geese singly in coops so small that they cannot stand up or turn around, and there stuff them with a kind of meal mixture every day, until they become loaded with fat. Then they are considered in good condition to kill and eat. Can any creature in creation be treated in this way, or as swine are fattened, and not become diseased? What, then, may we expect of an animal which, from our earliest knowledge of him, has been scrofulous? A good-natured farmer writes me that he and all his neighbors are pork-eaters, and that the people of "Old Kentuck" have always been fed on "hog and hominy," and yet are perfectly healthy and blessed with longevity. I reply, blessed with longevity, perhaps, but not entirely free from disease. I am often consulted by these

very farmers, who open by saying, "I am not sick, Doctor, but I am plagued with salt-rheum." Another writes, "I am the picture of health, and my neighbors would laugh at me if they knew I was applying to a physician; but I am troubled with catarrh." Another has piles, another worms, another rheumatism, another predisposition to sore throat, and so on; but all claim to be in the enjoyment of the best of health! But there are unquestionably pork-eaters who have no apparent disease whatever. Although the scrofulous impurities of their diet find lodgment, they remain latent in their systems, and are even transmitted to their children, without manifesting themselves in the parent stock. Those especially who till the

Fig. 18.

SHEEP—WHOLESOME TO THE EYE AND WHOLESOME TO THE STOMACH.

soil, toughened by exercise, strengthened by pure air, and relieved of much diseased matter by active perspiration, may carry with them to a gray old age a scrofulous impurity without suffering from

its presence. But how is it with their boys who enter counting-rooms in large cities, or adopt professions of a sedentary character? Have you never noticed how apt these scions of athletic sires are to break down before reaching the meridian of life? Other causes than these inherited impurities may often contribute to this result; but if impurities do exist to any extent, will they not be more likely to be active, and obtrusively present themselves in the form of disease, internal or external, in the confined atmosphere of the store or office, than on the broad acres of the parental homestead? It may be a question of no little importance, how much the diseases of young men in villages and cities are derived from pork-eating progenitors, who pursued the healthful occupation of tilling the soil and feeding the pig.

Mutton ought universally to be substituted for pork. It is more easily digested, and may be regarded as a healthful meat. Besides, it can be produced at much less expense than pork among the farmers, and yields more nourishment. Sheep need no corn, and can be kept during the winter on hay, turnips, beets, etc. True, pigs will eat what nothing else will, and consume all the slops in the kitchen; but a great deal of corn, or other solid food is required to fatten them for the butcher. Besides, sheep will eat all that is fit for food from the kitchen slops, and their preparation for the slaughter-house is attended with trifling expense.

As a rule, the flesh of herbivorous is more wholesome than that of carnivorous or omnivorous animals. The use of animal food of every kind has been pronounced injurious by many. That it is not necessary for the sustenance of man, in a normal state, I am fully convinced; equally satisfied am I that its moderate use is attended with no physical injury, but almost everywhere it is used to excess. Too much animal food inflames the system, and overloads the blood with the red corpuscle. In our climate, and in Southern latitudes, little or none should be used in summer, and in winter, there is enough heat-producing food, of a vegetable character, to impart sufficient warmth to those preferring vegetable diet. Still, beef, mutton, lamb, poultry, and even horse-flesh may be regarded as wholesome for food, if not eaten to excess. Professor St. Hilaire, of Paris, strongly urges the introduction of the latter as an aliment. He says that during the great French wars, the celebrated surgeon, Larry, was accustomed to give horse-flesh to the wounded soldiers,

and that he attributed their cure in many instances to this nourishment. The ancient Germans were in the habit of eating horse-flesh, and to this day, shops for the sale of this meat, under the superintendence of a veterinary college, exist by authority in Copenhagen. It is also resorted to by the poor of Vienna, while in Hamburg it commands a high price. The horse is considered a great delicacy in some of the Southern portions of South America, where it is introduced at the festive board as a luxury, equal to a sirloin of beef. There can be no doubt of its utility and cheapness on the battle-ground, where the majestic steed is hourly falling before the destructive cannon-ball. Those who turn up their noses at the idea of eating horse-flesh, are requested to lead a horse from the stable, and a pig from the gutter, and ask themselves which is the more respectable looking candidate for the carver.

If I may be allowed a brief paragraph, to deviate from the legitimate purpose of this chapter, I will remark that the excessive use of animal food is a great *social evil.* It is a proverbial fact, that mankind are too much given to the brute diversion of fighting. Our halls of legislation are disgraced with personal encounters between gentlemen who are *supposed* to be far elevated above the brute creation, by their distinguished intellectual endowments. Now, we have as good authority as Professor Liebig, that meat makes men more pugnacious. He says: "It is certain that three men, one of whom has had a full meal of beef and bread, the second, cheese, or salt fish, and the third, potatoes, regard a difficulty, which presents itself, from entirely different points of view. The effect of the different articles of food on the brain and nervous system, is different, according to certain constituents, peculiar to each of these forms of food. A bear kept in the anatomical department of this university, exhibited a very gentle character so long as he was fed exclusively on bread. A few days' feeding with flesh, rendered him savage, prone to bite, and even dangerous to his keeper. The carnivorous are in general stronger, bolder, and more pugnacious than the herbivorous animals on which they prey. In like manner, those nations which live on vegetable food, differ in disposition from those which live chiefly on flesh." Forbearance is a great Christian virtue, and should be cultivated by every enlightened man. Had human beings been intended for fighting animals, their finger-ends would have been decorated with huge unbending nails, and their jaws distend-

ed with savage tusks, like the boar. The excessive use of flesh is, therefore, sinful, and leads man to forget his present duty, and his heavenly destiny, because it excites those emotional faculties which are so prone to dethrone reason.

Much has been written, *pro* and *con*, as to the necessity of resorting to the animal kingdom for sustenance. It seems to me the vegetarians have the best of the argument. Vegetables possess all the necessary elements of food, and by combination, or eaten in variety, impart more nutrition than animal diet. According to the investigations of Liebig, and other celebrated chemists, peas, beans, and lentils contain more of the blood-forming principle to the pound, than meat; wheat meal contains about as much, and oat meal, barley meal, stale bread, and maize meal, about half as much; and when you seek the heat-forming principle, potatoes contain more than meat, while bread, peas, lentils, barley meal, beans, sago, maize, oatmeal, and rice, yield double and treble the supply to the pound that animal food does. Nearly all vegetables provided for the table contain more solid matter to the pound than meat possesses.

Facts sustain the vegetarian. A large portion of the people of Ireland, in their island home, hardly taste meat. They subsist upon potatoes, oatmeal, and cabbage. Many of the Asiatics mainly subsist on rice and vegetable oils. The Lazzaroni of Naples, with all their uncleanliness, idleness, and vice, maintain a good physical appearance on a diet of bread and potatoes. The Turks live mostly on vegetables, fruits, and nuts. A traveller remarks:—"Chops, substantial soups, joints, any thing on which a Westerner could support nature, are never seen in a Turkish bazaar." We have people living in various parts of the United States who are practical vegetarians, and eschew animal food of every description, excepting it may be eggs, milk, and butter, and some of these people do not use the latter. I once met a hard-meated, healthy young Jew, who subsisted on Graham bread, fruits, and nuts; and to carry out his dietetic rules he hired a room and boarded himself, which he could easily do without cook or housekeeper. D. U. Martin, the vegetable wherryman, gymnast, and phrenologist, tested his strength and endurance by subjecting himself to all sorts of hardships and exposures while pursuing strictly a vegetable diet. He subsequently adopted an exclusively fruit diet, mainly apples, with what results I am unable to state. It sometimes seems as if we only used meats as vehicles

for conveying salt, sauces, and condiments to the stomach. People think they love the flavor of animal food itself. Just try it without salt, pepper, mustard, butter, or other seasoning, and see.

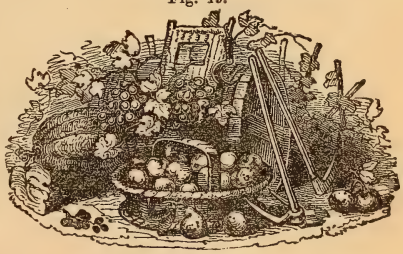
Advocates of animal diet generally refer to the teeth, and some to the anatomical formation of the stomach, for evidences that our Creator intended that we should eat meat; but the teeth and stomach of the orang-outang resemble those of man, and yet he does not belong to the carnivorous or omnivorous species. Du Chaillu says, that notwithstanding his large canine teeth, the gorilla of Africa is a strict vegetarian. According to Cuvier, "man's teeth are frugivorous—the cows, herbivorous—the lion's, carnivorous—and the hog's, omnivorous," so that both sides claim that the indications of the dental organs favor their distinctive views of diet. In eating the flesh of animals, as I look at it, we get vegetables second-hand, and contaminated more or less by the diseases with which they are affected. There is, however, in animal food, a stimulating property which vegetables do not possess. Having heard of vegetarians being made slightly intoxicated by beef-steak, I once induced a vegetarian friend to try the experiment on himself, and he assured me it produced in his brain a sensation similar to that induced by a slight potation of alcoholic liquor. It is said that Irishmen who live exclusively on vegetables at home, on enlisting in the British army are sometimes attacked with what is called "meat fever," in consequence of their new diet being so much more stimulating than that to which they had been accustomed.

There is a supposed necessity, and possibly a real necessity in some cases, for the use, to some extent, of animal food. This undoubtedly results from the habits of our ancestry. The child of an inebriate father often inherits his appetite, and cannot resist the temptation to drink intemperately of intoxicating beverages, and it may be easily supposed that the child of meat-eating parents may at least imagine he cannot live without meat. When, during a long line of ancestry, animal food has been the principal article of diet, the necessity may be actual instead of imaginary. He is like a patient who told me disease was his normal condition, and that medicine was his natural food! Opium-eating sometimes becomes a necessity by the perversion of the system by narcotism. Whatever may have been the original design of our Creator, to allow mankind in the infancy of its development to live upon the flesh of other animals, I am confident the time will come

when a more beautifully developed and Christianized humanity will look back upon us of this century as a race of cannibals. No man or woman to-day, of noble sentiment and sympathetic nature, unless the *habitué* of the market, and thus hardened by familiarity with such sights, can pass the stall of the butcher with its display of trunkless heads of calves, pigs, and cattle, and the bleeding and partly flayed carcasses of lambs and sheep, or look upon the white, but blood-stained apron of the meat-man, holding his monstrous knife, without a shudder, and a feeling of self-condemnation that he and she are accessory to this wholesale slaughter of innocent animals. "The dog delights to bark and bite;" it is the instinct of the cat to sneakingly assail and devour animals too weak to resist her prowess; it is in the nature of the huge boa-constrictor to swallow pigeons, rabbits, and other small game by the bushel; it is the habit of the large fish to live upon the smaller ones, etc. But when we ascend from these lower species of the animal kingdom to the noblest work of God, may we not reasonably look for an end to this mutual carnage for the wherewithal to keep the vital machinery in action?

What excuse for man, who can shake from the tree above his head the juicy fruit which is ready to fall ripe into his hand; who can pluck from the vine clusters of delicious grapes containing all the elements of food, prepared only as Old Dame Nature can prepare them; who can plough up the rich sod, and produce by the planting succulent vegetables and fields of golden grain, and beneath the surface of the grim soil, esculent roots capable of imparting warmth and nourishment to the body; who can find in the rich meats of abundant nuts, and other oily products of plants and trees, all the oleaginous properties which animal fat supplies; what excuse, I ask, for man, with all these luxuries at hand, loaded with the necessary alimentary constituents, to imitate the murderous instincts of the lower animals, and cannibally live upon animals less powerful than himself! There is one excuse, and only one, that can be presented for a man of this century, namely:

Fig. 19.



VEGETABLE FOOD.

a meat-eating ancestry, and in some cases an ancestry of meat gormands. As before remarked, with some persons it seems to be an inherited necessity. But I have faith that man will some time outgrow this brutal appetite—this cruel physical necessity. The dawn of the millennium cannot light up human hands and arms red with the blood of slaughtered animals, or overtake the athletic man picking the bones of tiny birds! The ingenious Yankee will invent a substitute for leather, and we already have enough substitutes for ivory and bone. There are millions of men and women to-day, who would give up a meat diet if they were compelled to slay the animals they eat. Stop for a moment, and read how the killing is done. I clip the following from a daily paper; it is headed "How Cattle are Slaughtered—Sunday Scenes at the Abattoir." The writer then proceeds: "On the arrival of cattle, they are transferred from the cars to yards, where usually they remain until sold or slaughtered. Before they are killed, eight or ten are driven up an inclined plane into the abattoir, where they are confined in pens about ten feet square. A row of these pens extends across the building, directly back of the dressing racks. When an animal is needed, he is either drawn up with a rope attached to his hind leg, or he is speared. If the cattle are wild, the executioner mounts the stall, and takes his stand immediately over his victim. His spear is a rod of iron, six feet long, an inch in diameter, sharpened at the end like an oyster-knife. The 'killing spot' is just behind the horns, on the neck, which the spearsman frequently does not hit. To see a person throwing one of these spears into a pen of cattle is sickening. Often several bullocks are pierced in the forehead or eyes, and their faces are streaming with blood long before the death of a single one! The wounded, after waiting from ten minutes to an hour for their turn, are again attacked, and killed one by one, the survivors receiving fresh wounds on every attack! A Western expert," continues this writer, "styles this treatment the devilish torture of a bungling butcher." (If it only were, I should say Amen; but it seems to be the devilish torture of innocent animals.) "Cattle are not the only sufferers, but the swine are also pierced, and often plunged into scalding water before they are dead! The butchers say that the spear is used for killing wild cattle only; but one who frequents the abattoir says that the contrary is the fact. Even the windlass is a barbarous instrument. With this a noose is fastened to the animal's

hind leg; the machinery is then started, the bullock tumbles over, and after being swung up alive, his throat is cut. In Cincinnati the butchers knock their hogs in the head with a long-handled hammer; but in Chicago," the writer thinks, "dumb brutes are killed humanely. A rope communicating with a windlass passes through a ring in the floor, and is made fast to the bullock's horn. Then a man turns a crank, and the animal is gently led into the slaughter-house, where, at one blow, he falls to the floor. The executioner never misses his mark, because the bullock's head is held immovable by the ring."

Fig. 20.

THE ANIMALS WE SLAUGHTER.

Farmers who do the slaughtering upon their own premises, for their family use, generally treat their animals with greater gentleness; but under the best of circumstances, cutting the throats of lambs, knocking cattle on the head, piercing the jugular of the hog, guillotining poultry with an axe, cannot be done in any way to avoid shocking the sensibilities of people who have kind hearts and educated heads. It is in vain to talk of this murderous work being done humanely, and such are its effects upon those styled butchers, that they are not allowed, in some States, to sit upon a jury in cases involving the life of the criminal!

Our humane Mr. Bergh, who has effected so much in mitigating

the cruelties practised on animals, writing to Dr. Holmes, remarked as follows :—"I believe as you do, that the abolition of the use of the flesh of all animals would result in physical and moral improvement to our race. Having been in countries where meat is rarely, if ever eaten, and having observed the superior endurance of fatigue, as well as gentleness of character, of the inhabitants, I feel convinced that the slaughter of dumb animals, and the devouring of their flesh, account for the largest share of the moral and physical diseases which affect mankind. I have had an Arab of the desert run behind my horse a distance of twelve miles without betraying the least sign of fatigue, and the cheerful fellow had never tasted meat. For my own part," continues Mr. Bergh, "I can eat meat because of habit. But then the least appearance of blood, by reason of insufficient cooking, shocks my sensibilities, and causes my stomach to revolt." God grant that every generation of man may consume less animal flesh, and feed his children with still less, until the human race shall outgrow a habit which makes him little better than a cannibal.

Grease is supplied quite too abundantly for the table to preserve the purity of the blood. Weak stomachs call loudly for reform in this particular, while strong ones faithfully perform their work of sending the offending substance to the vascular system, to feed or create humors. Fat is not digested in the stomach, but simply melted and absorbed into the blood. A certain amount is necessary to nourish the brain, and save the wear and tear of the nervous system; but fatty meats and rich gravies are positively injurious. Dead animal fats are non-conductors of electricity, and their presence in large quantities in the stomach tends to resist the action of the nervous fluids furnished by the brain through the pneumo-gastric nerve, and to impair digestion. Eggs, milk, butter, and vegetables yielding oil, furnish all the oleaginous substance necessary to carry on the processes of nature.

Diet exercises such an influence upon us all, physically and morally, too much care cannot be observed as to the quality of the food we eat, and the regularity with which it is taken. A newspaper writer, I don't know whom, remarks, "that much of our conduct depends upon the character of the food we eat. Bonaparte used to attribute the loss of one of his battles to a poor dinner, which at the time disturbed his digestion. How many of our mis-judgments, how many of our deliberate errors, how many of our unkindnesses, our

cruelties, our acts of thoughtlessness and recklessness, may be actually owing to a cause of the same character. We eat something that deranges the condition of the stomach. Through the stomach nerve, that derangement immediately affects the brain. Moroseness succeeds amiability, and under its influence we do that which would shock our sensibility at any other moment. The disturbance of the digestion may involve the liver. In this affliction the brain profoundly sympathizes. The temper is soured, the understanding is narrowed, prejudices are strengthened, generous impulses are subdued, selfishness, originated by physical disturbances which perpetually attract the mind's attention, becomes a chronic mental disorder. The feeling of charity dies out; we live for ourselves alone; we have no care for others, and all this change of nature is the consequence of an injudicious diet." Protracted intervals between meals should always be avoided, if possible. In large cities, it is the custom of many business men to go from 8 or 9 A. M. to 4 or 5 P. M. without eating. Three-fourths of the merchants of New York do not dine till 5 o'clock, and a large number of these take no luncheon. A writer, quoting from Dr. Combe, and "Household Science," advances some sensible views, which may be appropriately introduced here. He says:—"The grand rule in fixing the number and periods of our meals is to proportion them to the real wants of the system as modified by age, sex, health, and manner of life, as indicated by the true returns of appetite. As the blood is usually most impoverished after the eight or ten hours' fast of the night, breakfast should be early. The stomach is usually vacated of its nutritive contents in about four hours after eating, but it may be an hour or two later before the blood begins to call upon it for a renewed supply. Persons engaged in active labor, in which bodily expenditure is rapid, of course require to eat more often than the indolent and sedentary, and children need nourishment oftener than adults. But too long abstinence, especially if the digestive power be not strong, sharpens the appetite, so that there arises danger of excessive eating. Some avoid luncheon, for fear of spoiling the dinner, whereas the thing they most need is to have it spoiled. When the intervals between the meals are so long as to produce pressing hunger, something should be taken between them to stay the appetite, and prevent over-eating. Late and hearty suppers are to be reprobated; active digestion and sleep mutually disturb each other, as at night

the exhalation of carbonic gas is lowest, and tissue changes most retarded. The overloaded blood is not relieved, and invades the repose of the brain, producing heavy, disordered dreams, and nightmare, followed by headache and ill-humor in the morning. Still, there is the opposite extreme, of sitting up late, and going to bed wearied, hungry, and with an indefinable sense of sinking, followed by restless, unrefreshing sleep. A little light nourishment in such cases, a couple of hours before retiring, may prevent these unpleasant effects."

The Hon. Preston King, who destroyed himself under a sudden fit of mental aberration, had exceedingly eccentric and injurious dietetic habits, and these undoubtedly had something to do with the insanity which led him to jump from a ferry-boat to the bottom of the Hudson River. He breakfasted at nine or ten o'clock in the forenoon, and remained without further food until five o'clock in the afternoon, when he would repair to the Astor House and partake of a hearty dinner. Next came cigars and visitors till ten or eleven o'clock in the evening, and then a hearty supper.

Some one has remarked, "that the idle man is the devil's man, and it may also be said of the stomach, that if it has nothing to do, it will be doing mischief." The gastric fluids require something to act upon, and if there is no food in the stomach they take to the membranes and coatings, causing irritation, if not inflammation. It is true, that they are not secreted by the stomach to any great extent, except when food is present, but sufficiently bathe the lining of the stomach at all times, to produce disturbance, if the stomach is allowed to go long empty. These fluids act upon the food the same as the acid in the battery upon the galvanized zinc. If the latter is not frequently replenished with a coating of quicksilver, the zinc will soon be destroyed. So with the stomach; if it is not supplied with food, the gastric fluids will do mischief to its delicate membranes. Better take four light meals a day, than to allow the stomach to become empty, or overloaded once in three. The breakfast should be taken very soon after rising. In malarious regions, especially, the system is more susceptible to the influence of cold, noxious gases, etc., before breakfast. Food should not be taken after severe exercise, nor should exercise of very active character be taken immediately after eating. Too much food overpowers the nervous system as much as excessive muscular exercise. To sum up all under

this head, people must be more careful what they eat, at what times they eat, how much they eat, if they would preserve the healthy condition of the vascular and nervous systems. There can be no precise rule laid down for the governance of all. A little careful observation, however, would teach every one of mature age what is best adapted to his particular organization. If men would watch with half as much anxiety the influences of different articles of food on their systems, as they do the effects of growing crops, and financial failures on the money market, longevity would oftener be obtained than large fortunes.

The Liquids we Drink.

A correct understanding of the effects of various liquids commonly used as beverages, will enable the reader to understand how much they have to do in the production of nervous derangements, and blood impurities. It is estimated that every person drinks about 1500 pounds of liquids per annum. All these are filtered through the human system, leaving whatever nutritious or poisonous properties they possess. The Chinese tea forms the principal beverage of all the Northern States, and British Provinces of America. In Central America, the heterogeneous population resort to chocolate, while in South America, the tea of Paraguay is freely indulged in. In the Southern States, and West India Islands, coffee seems to be the greater favorite, particularly with adopted citizens, and perhaps this remark is equally true of this class in the Northern States. In France, Germany, Sweden, and Turkey, coffee is principally used; in England, Russia, and Holland, tea; in Spain and Italy, chocolate; in Ireland, the husks of cocoa. The Chinese tea has found its way to the Himalayas and the plains of Siberia, and is probably drank by more people than any other beverage. Coffee-leaf tea is sipped in Sumatra, while the Ethiopians of Central Africa quaff the Abyssinian chaat. In portions of Africa, the natives make a beverage of the juice of the plantain, called pombe. The plantain is said to be "the food, and its juice the drink of the people." Pombe is intoxicating,

Fig. 21.

THE LIQUIDS WE DRINK.

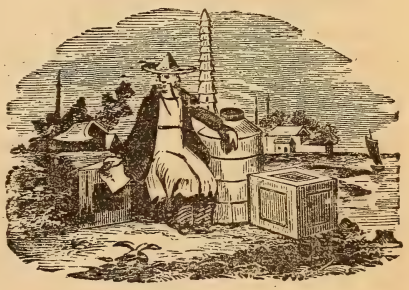
and a traveler relates that "no man of any standing thinks himself to have got fairly through the day, until he has sat upon pombe, which simply means become drunk." The Mexicans make several liquors from a plant that grows very extensively there, called the maguey, the most common of which liquor is called pulque. It is as common in that country, and as much prized, as beer is in Germany. The Indians along the borders of the Rio Grande, slice and dry what they call pieoke, and what the whites denominate "whiskey root," which they chew until its intoxicating effects are experienced. In all civilized countries, malt and vinous liquors, rum, whiskey, brandy, gin, and other distilled liquors are drank in enormous quantities. It may be truly said, that whiskey leads the march of civilization. Wherever the missionary or the agent of commerce penetrates, civilization creeps along with rum in the advance.

Authors and orators are often excessive topers. The author of "The Raven" died of the effects of a drunken frolic. One of the most eloquent men that ever graced the Senate of the United States, and to whom on one occasion when he was speaking, a celebrated English authoress threw her glove, as a demonstration of her appreciation of his eloquence, dropped from the eminence he had gained, before the world fairly knew him, overpowered with excessive indulgence in strong drink. Gluck, the musical composer, drew his inspiration from champagne; Southey drank hot rum at bed-time; Coleridge absorbed rum excessively; Byron's poems were the products of poet's brains macerated in gin. Rabelais said, "eating and drinking are my two sources of inspiration. See this bottle? It is my true and only Helicon, my cabalistic fountain, my sole enthusiasm. Drinking, I deliberate, and deliberating, I drink." "Ennius, Æschylus, and Cato," remarks a writer, "all got their inspiration while drinking; Mezzerai had always a large bottle of wine beside him among his books; he drank of it at each page he wrote." It is not surprising that some one discovered that "genius to madness is close allied," and since that discovery, we see many who seem to think that madness to genius is close allied, so that all they have to do to exhibit great genius, is to get drunk. We will not, however, dwell longer on the drinking proclivities of nationalities and individuals, but proceed to look into the qualities and effects of our most common beverages.

Tea and Coffee.—Tea was first brought to the notice of Europeans by the Portuguese in the 16th century, although previously to that period warm drinks were extensively made from sage and other herbs. Coffee was first introduced into southern Europe in the same century, but the Persians received it from Ethiopia as early as the 8th century. Unadulterated tea, as it comes upon the table, contains gum, grape sugar, tannin, and theine; and coffee ready for use possesses fat and volatile oil, sugar (such as may be obtained from grape, honey, and most acid fruits), dextrine, and caffeine. Both the theine of tea and caffeine of coffee furnish the elements of bile.

The enthusiasm which these beverages have awakened, respecting their agreeable qualities, may be interesting here. An astute Chinaman, with the funny cognomen of Lo Yu, who sipped piping-hot tea over one thousand years ago, said, "it tempers the spirits and harmonizes the mind, dispels lassitude, and relieves fatigue, awakens thought and prevents drowsiness, lightens or refreshes the body and clears the perceptive faculties." A European of the 16th century spoke of coffee "as a beverage which helpeth digestion and procureth alacrity." Whether Chinaman and European were entirely right or not, in their estimate of the good qualities of tea and coffee, the fact presents itself to-day, that no beverages are so extensively used; and I think modern writers may say with truth, that if used moderately, and with due reference to temperament and individual idiosyncrasy, none are more harmless.

Fig. 22.



CHINESE TEA-TRADER.

The fact that tea does not agree with one person, does not prove it dangerous or injurious for another. Some people cannot eat strawberries without an attack of colic; others enjoy strawberries, but a sweet apple will create constipation. The effects of tea and coffee depend entirely on the physical peculiarities of the drinkers, and the same as in the use of food, no definite rule can be laid down. General directions may be given, which, if observed, will enable most

intelligent persons to judge of what is positively hurtful in their individual cases. Few nervous people can drink tea, while those of a bilious and lymphatic temperament, can indulge with impunity. The effects on the former are usually weakness, tremor, hysteria, hypochondria, and paralysis; while on the latter, they are mental and corporeal exhilaration. Tea acts at once on the nervous system, quickening the circulation of the electrical elements, and imparting to the man of sluggish nerve activity and vivacity, and its use often allays headache induced by bilious disturbances. With its narcotic properties, it possesses peculiar exhilarating powers, which may result in a measure from the speedy re-actory effects of the former. Coffee, on the other hand, is generally suitable to lean, nervous persons. It acts upon the blood, and is bracing to the muscular system. Persons who are not bilious may often allay a severe headache, if not caused by indigestion, or a weakness of the stomach, by a moderate potation of this luxury. It is a palliative in spasmodic diseases, hysterical affections, and chronic diarrhœa, and asthmatic persons find relief in its use, provided other peculiarities of their systems do not reject it. Coffee should not be used by fleshy and bilious people. It thickens the blood, and apoplexy is sometimes the result of its excessive use. For the same reason, chocolate and cocoa may be drank by lean, nervous people, while they are injurious to those of corpulent tendency. Many nervous individuals, however, cannot drink coffee, chocolate, or cocoa, for the same reason they cannot drink any hot beverages, *i. e.*, they stimulate in too great a degree the action of the stomach battery, by which means the system becomes overpowered, not exactly with the quantity, but velocity of the animal electrical currents, and the vital organs rendered too active. Pour hot water into the acid of a galvanic battery, and the generation of electricity is greatly accelerated. As in eating, therefore, effects should be watched and heeded. Tea and coffee, like many other things, are abused. They are universally used to excess, and by many who should not use them at all. They are also often badly adulterated. The producers of both of these staples have among them people who are quite as unscrupulous as are those farmers who sell apples and potatoes, with large ones only at the top of the barrel; or, as those who not knowing which end of the barrel will be opened, put the small ones in the middle and the large ones at either end. John Chinaman is even worse, for he puts poison in tea to improve its appearance.

Sir John Davis caught him adding Prussian blue, indigo, and porcelain clay, to give inferior tea a good salable color. According to Hassell, all green teas are colored; naturally, they look like black teas, with the exception of having a tint of olive. Black teas having a very smooth and glossy appearance, are made so by rolling the leaves with pulverized black lead, a powerful poison. The English merchants sometimes play a scaly trick on tea drinkers, by purchasing from hotels, cheap boarding-houses, and other public eating places, tea leaves which have been used, and dried, and mixing them with genuine teas. This bit of cheatery enables them to undersell their more honorable competitors. Traders who can do this are fit companions for tobacco manufacturers, who have collected from the streets and sidewalks cigar stumps which they manufacture into smoking tobacco.

The adulterations of tea are much more deleterious to health than those commonly practised in coffee. English chiccory, which is similar to our dandelion, is extensively employed in supplying the market with cheap coffee. It possesses little of the nutritive properties of genuine coffee, and is entirely unlike it medicinally. For instance, coffee does not act well on systems affected with bilious disorders, and usually benefits rather than injures persons having nervous affections without any hepatic or digestive disturbances. It is just the reverse with chiccory. This is often applied in bilious affections, and its protracted use injures the nervous system. Not content with adulterating coffee with chiccory, the grasping dealer often adulterates chiccory with scorched wheat, peas, acorns, rye, beans, corn, carrots, etc., and to such an extent, that those who purchase packages ready burned and ground, labelled "coffee," do not know what they drink. The only safe plan for the consumer is to purchase the berry before it is ground. If it costs more, it is simply because it is not adulterated, while the ground article is cheaper for no other reason than because it is composed of something cheaper than the coffee berry. These coffee adulterations may be easily avoided; it would be a comfort if those of tea could be as competently set aside. It would be, however, a prudent measure for everybody to give up the use of green teas altogether, and not use the black when the leaves have a very smooth and glossy appearance, or when they will not unfold in boiling water.

Malt Beer has become a very popular beverage, and may be considered wholesome, if used in moderation by lean, nervous, cold, and bloodless persons, for which reason it is not a proper beverage for corpulent and bilious men. Its excessive use generates too much heat and density in the blood, causing a predisposition to palsy and apoplexy. The ingredients of unadulterated malt liquors are, malt, hops, yeast, and water, and hard water is said to make very much better beer than soft. In this country, wheat is used in making malt; in England, barley is employed, and in India, rice. Both ale, and what is popularly known as "lager bier" possess pretty much the same constituents, but not in the same proportion, nor are the processes of manufacture similar. Ale is a heavier drink, and is less wholesome than lager bier, for persons at all predisposed to bilious affections; but lean, cadaverous persons, not so disposed, may build up faster by using ale or porter, if these beverages do not prove too greatly tonic in their effects.

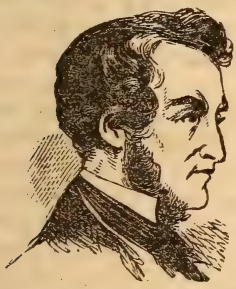
According to Liebig, good beer gives warmth and stimulus not unlike that imparted by the use of bread and meat. It holds in solution sugar, gum, and starch, and with the tonic and hypnotic properties of the hop, it becomes a nourishing and nerve-quieting drink for all feeble and nervous persons, whose constitutions will admit of its use. As might be inferred from the present beer-drinking propensities of the Germans, it is no new beverage to them. The ancient Latin historian, Tacitus, speaks of its use among this people over a thousand years ago. It is well that the avaricious, scheming Yankee did not live then, or it may reasonably be questioned whether the fat representative of "fader-land" would have been in existence to-day.

Fig. 23.

THE MAN WHO DRINKS MODERN LIQUORS.

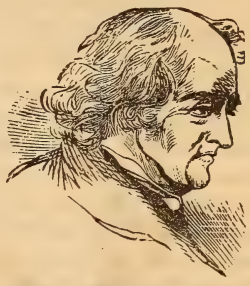
His tombstone would have been engraved in German text, "died of adulterated beer." The reader is not probably aware that a large proportion of the beer sold nowadays under the various names of lager, porter, ale, etc., are base adulterations; but it is so, particularly in the "corner groceries" of large towns. Wormwood and aloes are even substituted as a bitter for the invigorating and nerve-soothing hop; sulphate of iron, alum, and salt, are sometimes used to give it a frothy or effervescent property. Bad or weak beer is made palatable by the addition of coriander seed, hartshorn, liquorice, copperas, Spanish juice, quassia, orange-peel, capsicum, ginger root, and so forth. New beer is made to taste like that two years old by

Fig. 24.



THE MAN WHO DON'T.

Fig. 25.



THE AUTUMN OF A TEMPERATE LIFE.

the addition of sulphuric acid. I have had this article imposed on me in New York, so bunglingly prepared as to betray its poisonous, artificial maturity as soon as tasted. Great care, therefore, should be taken by those who wish to derive benefit from beer, to obtain a good article. Do not buy unless you know the retailer and brewer, at least by reputation. The patrons of promiscuous beer cellars, are filling their blood with inflammable impurities, which render their systems ready victims to rheumatism, fevers, and epidemics.

Vinous and Distilled Liquors have accomplished a great deal of good and misery for mankind. The useful medical properties of unadulterated wine, brandy, gin, rum, and whiskey, have never been disputed by any large number of intelligent people, while as beverages they have been held in much favor by not a few of the intelligent as well as illiterate men of all civilized nations.

This irrepressible popularity is unquestionably due to the fact that all the races of mankind are so imperfect in their physical developments. The whole human family is sick, and alcohol is the great drug, the popular panacea. The time will undoubtedly come when distilled liquors will find their appropriate place on the shelves of the apothecary. Extreme teetotallers, who denounce distilled liquors without qualification, condemn alcohol as a poison. They are correct; it is a poison, or at least acts very much like one when taken in large doses. It is, however, the product of the most nutritive substances, and of so much value to them, that they decay as soon as the alcohol is taken from them, either by distillation or evaporation. A little of this poison added to a mash of decaying vegetables, or to fermenting syrups, arrests the chemical change they are undergoing. Brandy peaches are rated as a delectable dish by epicures, but the peaches so preserved are saved from decay by the alcohol which the brandy contains. Leave the jar open, so that the alcohol may evaporate, and the fruit will in time decay. Canned fruits, which are nowadays so popular in every household, are preserved by sealing them so closely that the air cannot take away by evaporation the alcohol possessed by the fruits, or the syrups added to them. The flesh of animals may be preserved by being bottled and corked in alcohol; and therefore, we are compelled to recognize in that poison, alcohol, a preservative principle which may be judiciously used, if not abused.

Taken into the human system, alcohol retards the too rapid waste which is going on in the physical constituents of one who is diseased. In people of a scrofulous diathesis, the corpuscles of the blood exhibit a kind of decomposed or rotten appearance, and this disposition to rot may be arrested by the judicious use of liquors. The correctness of both of these propositions rests in the well-known fact that alcohol has the power to prevent decomposition and decay of animal matter. Cases have no doubt come to the observation of many readers, wherein the strictly temperate children of scrofulous parentage have died young, while the wilder ones, or the "black sheep" of the family, who have been given to habits of drinking, have lived to a gray old age.

The thin and watery blood of colorless invalids may, in many cases, be changed to a healthy condition by a moderate use of alco-

holic drinks, the tonic and stimulating properties of which seem to concentrate and congeal the unorganized solid substances of the blood, and by the assistance of nature form them into healthy corpuscles. They also diminish the bulk of the watery constituents. This last proposition is entirely consistent with the well-known chemical properties of alcohol. The proof of the other lies in the fact that a little alcohol added to fresh blood, imparts to it greater density and redness. It is an interesting experiment to place a shallow glass vessel in a position between yourself below, and a bright gaslight above; then have some one pour into the vessel a little fresh blood followed with a small quantity of alcohol. At once there is great perturbation among the fluids ending in a considerable condensation of them; also a concentration and reddening of the solid constituents. Fresh milk contains butter in solution, but it requires a strong arm to separate the substance from the liquid. When this is done, a weak hand may roll it into balls, and impress the faces of them with an embellishing stamp. However deficient the blood may be, in any case, of corpuscles and globules, it most unquestionably possesses all these, at least in solution, and though nature may need some assistance in separating the solids from the fluids, her strength may be equal to the task, after this is done, to form them into the globules and corpuscles. This assistance alcohol seems able to give, if it does not in some way disagree with the constitutional peculiarities of the patient. Cases illustrative of this fact have not only occurred a thousand times under the eye of the physician, but are well known to the public generally.

Alcohol, in a measure, supplies a substitute for animal caloric, in persons lacking vascular vitality. In these cases, the blood is always innutritious and watery. The alcohol combining with these excessive watery properties, generates heat. The proof of this we have in the well-known chemical law, that when alcohol is added to fluid, heat is evolved.

The effect of alcohol upon the blood is quite direct, because it is not digested in the stomach at all, but is absorbed into the blood in precisely the same condition that it enters the stomach, and the system disposes of it afterward by evaporation. It passes off with the insensible perspiration, with the exhalations from the lungs, etc.

In persons of greatly reduced strength, and having an insufficient supply of nervous vitality, alcohol seems to furnish, temporarily, at

least, a substitute for nerve force, which carries them over an unbridged chasm, and sustains them until the recuperative powers of nature can rally to their assistance. Facts sustaining this statement have come under the observation of every physician, or nurse, in either acute or chronic practice. At moments when a patient seems to be in a sinking condition, the administration of an alcoholic stimulant in the form of brandy, or of vinous liquors, will revive him.

Alcohol is an almost indispensable agent in the laboratory, in the preparation of tinctures and extracts. The virtues of many plants would be lost without the aid of alcohol to extract them. After this extraction, however, the alcohol may be "turned out of doors," by evaporation, so that it is not an indispensable part of a treatment to administer this poison to the patient whose physical condition would not require it.

For the same reason that vinous and distilled liquors are beneficial to some people, they are dangerous and injurious to others. Those having healthy blood, and plenty of nervous vitality, may carry the thickening of the one, and the stimulation of the other, too far, so that the former be made too sluggish in its circulation, and the latter excessive in its action. The blood, becoming too thick, congests the minute and sensitive arteries and veins of the brain, and causes apoplexy, congestion of the brain, etc. The nervous system, maddened by excitement, renders the brain a victim to all sorts of mental vagaries, ending, if carried beyond a certain limit, in delirium tremens.

The evil of alcohol is its power to dethrone reason, and lead its victim a drivelling captive to poverty, vice, and crime. It enables people to overwork mind and body; to revive spirits, depressed by social dissipation; to put to rest a stomach loaded with unwholesome viands; to silence the voice of an outraged conscience; to drown the woes which a reckless life has engendered.

Alcohol *disease* is a terrible malady. It is attended with constant and insatiable thirst, and the victim seems powerless to reform. Dr. Day, of the Binghampton Inebriate Asylum, says, that dissections of dead drunkards betray enlargements of the "globules of which the brain, blood, and other organs are composed, so that those globules stand open-mouthed, as it were, empty, athirst, inflamed, and eager to be filled." To people thus affected, who have reform-

ed, and seemingly got the better of the disease, alcohol, in any form, is a dangerous medicine; and physicians should exercise great caution when such cases come under their care. There are, undoubtedly, quite as many affected with alcohol disease, as with dyspepsia—possibly more—facts which exhibit the evils of excessive drinking, as well as those of excessive and ill-timed eating. All intemperance has its physical as well as moral penalties, which sometimes fall with crushing weight on those who do not study their constitutional peculiarities, and confine themselves to such habits in life as in their best judgment promote strength of nerve, and purity of blood.

A most shocking evil which topers have to encounter, is the poisonous adulteration of liquors. There is reason to doubt if the strenuous, but well-intended efforts of temperance philanthropists to check the use of spirituous liquors, have not augmented the evils of intemperance, by driving almost all respectable men from the traffic, in consequence of which, it has been left open to the piratical speculations of unprincipled vagabonds, who do not scruple to sell their customers a destructive compound of Spanish juice, spirits, sulphuric acid, burnt sugar, etc., for brandy; alum, acetate of lead, carbonate of potash, tincture of capsicum, juniper oil, coriander seed, calamus root, and sulphuric acid, added to a small portion of some of the diluted genuine article, for gin; strychnine, lye of ashes, etc., compounded with water and spirits, for whiskey; and damaged cider, poor wines, sugar, brandy, and tartaric acid, ingeniously compounded, for champagne. Coercive laws, for the suppression of the sale of ardent spirits, seem to have proved utterly futile in effecting their object, while the adulterations just alluded to, have been increased by the disreputable hands which manipulate modern liquors. Many honest-minded teetotallers admit this fact. Enough whiskey is manufactured in this country, annually, to allow from three to five gallons for every man, woman, and child. More than one-half of all this whiskey is a slaughtering compound, whose pernicious properties are sowing the seeds of death in the blood and nerve of millions of people. It has been said by physicians, having charge of public institutions, that it is almost impossible to treat delirium tremens successfully now, in consequence of the utter prostration of the nervous system of drunkards by the strychnine so generally used in the manufacture of liquors. The readers of the daily press must have noticed too, how frequently nowadays, we hear of cases of

spontaneous combustion in those who have saturated their bodies with modern rum. What in the world can the infernal inventions of modern liquor manufacturers be composed of, to have the power to make the human system so inflammable as to cause a living body to become a victim to flame, and perish by burning without the aid of fagot!

A chemical inspector of liquors has announced that he made two hundred and forty-nine inspections of the various varieties of spirits, and that he found more than one-tenth of them imitation, and a great portion of them poisonous concoctions. As the result of his investigations, he remarks, that of brandy he does not believe there is one gallon of pure in a hundred, the imitations having corn-whiskey for a basis, and various poisonous acids for the condiments. Of wine, not a gallon in a thousand purporting to be sherry, port, sweet Malaga, is pure; but they are composed of water, sulphuric acid, alum, cayenne pepper, horse-radish, and many of them without a drop of alcoholic spirit. Speaking of whiskey, he adds, that in his inspection, he has found only 17 to 29 per cent. of alcoholic spirit, when it should have had 45 to 50, and some of it contained sulphuric acid enough in a quart to eat a hole through a man's stomach. A few years ago, several hundred hogs died at a distillery from the effects of strychnine used in the preparation of whiskey, they having feasted their ravenous stomachs on the slops. There was a time when whiskey drunkards frequently attained a remarkable longevity. How many whiskey-drinking octogenarians can be found to-day? Strychnine destroys the equipoise of Nature—augments the alkalies of the mucous membranes, and thereby destroys the harmonious evolutions of vital electricity, carried on by the combined action of the internal and external fluids. Considering all these circumstances, it is, to make use of a common paraphrase, "dangerous to be safe" to indulge in intoxicating liquors at all.

Drunkards are not properly treated to effect their reformation. Men of unfortunate habits are daily arrested in our large cities, dragged to dark and dismal cells, locked up for the night, and in the morning taken before the police magistrate, charged with gross intoxication, when they are either "sent up" for thirty days, or fined ten dollars, or perhaps, in some cases, both penalties are inflicted. A man who is in the habit of getting drunk will not think much of ten dollars after he has taken the third horn, and by the time he has

taken his tenth, he becomes too oblivious to care whether he sleeps in his own bed at home, or upon the floor of a cell at the station-house. But he awakens the next morning, to find that he has taken one more step in disgracing himself, and with his self-respect considerably lowered, he emerges from his cell to receive his examination and sentence. As many times as he gets drunk, so many times is he put through this process of degradation, until every particle of his manhood is thoroughly worked out of him. The proper way to treat these slaves to appetite would be to sentence them to ten days of instruction on the injurious effects of intemperance, and the fatal effects of adulterated liquors. It would be public economy to employ good lecturers, who could portray in stirring words, such as Gough utters, the misery entailed, morally, socially, and physically, by intemperance, and at the same time exhibit by anatomical plates, prepared expressly for the purpose, the serious injuries the stomach and other organs suffer through the effects of inebriety, and the villanous concoctions sold as vinous and distilled liquors. Every large city could well afford an institution of this kind, with every necessary facility for improving the minds and morals of those who are picked up

Fig. 26.

THE FARM-YARD, THE ONLY PLACE TO FIND PURE COW'S MILK.

drunk in the streets. In the rural districts, every county could economically make such an investment, and in this way a multitude of inebriate homes could be sustained at no greater expense than is now incurred in punishing the offenders of law and good order, who are made so through intemperance in the use of ardent spirits. Many young men go on a spree without thinking they receive more than temporary

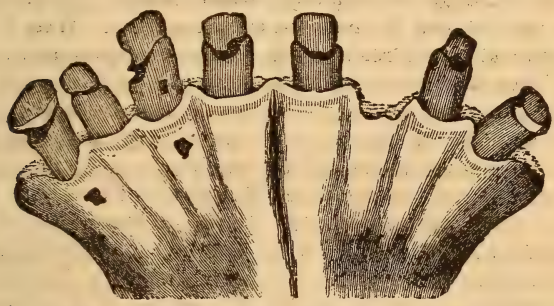
injury, which a little attention to diet, etc., for a few days, will overcome; and many a hardened toper thinks when he takes a notion to stop the use of intoxicating drinks, that will be the end of it. Such uninformed persons should be taught better. There is no prospect of their receiving the necessary tuition, so long as they are simply fined and imprisoned for becoming intoxicated.

Having hastily reviewed the constituents and physical effects of the most common beverages concocted by man, and passed some strictures upon them and their consumers, I will now call the attention of the reader to those fluids which Nature has so abundantly furnished for the use of mankind. Many may be surprised to find that these are not entirely above criticism.

Milk is the first fluid which is permitted to enter the human system; and perhaps, considering the ignorance, indiscrimination, and reckless folly of the mass of human animals, it were better if others had never been provided. Milk contains all the elements of wholesome food, and all that is necessary to the sustenance and growth of the animal organism. Its constituents are water, sugar, butter, caseine, or curd, and the various salts necessary for the support of the system. The sugar of milk is less apt to produce acidity of the stomach than the sugar of vegetables, and it is prepared in Switzerland for food, and exported for the Homœopathists, who use it in making their little medicated pellets. No milk contains so much of this sugar as that from the breasts of woman. Indeed, all the constituents of milk vary considerably in their proportions in different animals. Compared with that from the cow, woman's milk contains not only more sugar but more water, and usually more salts, while it contains less butter and caseine. This difference renders it impossible to make cow's milk a perfect substitute for that from the breast of the mother for infants. If common sugar be added to the milk of the cow to make up a deficiency in this property, and water to lessen the excessive supply of butter and caseine, the babe becomes affected with sour stomach and indigestion. If the cow be fed on improper food, such as still slops, its milk becomes a still poorer substitute for the mother's milk for the child, because it contains a still less supply of sugar of milk and natural salts, and an excessive quantity of caseine. The deficiencies and inequalities are sometimes regulated by shrewd dealers, but the milk cannot be made to possess

the properties of that from a healthy, grazing cow. Milk is extensively adulterated in large villages and cities. A man living in the suburbs of this city was reported to the President of the Sanitary

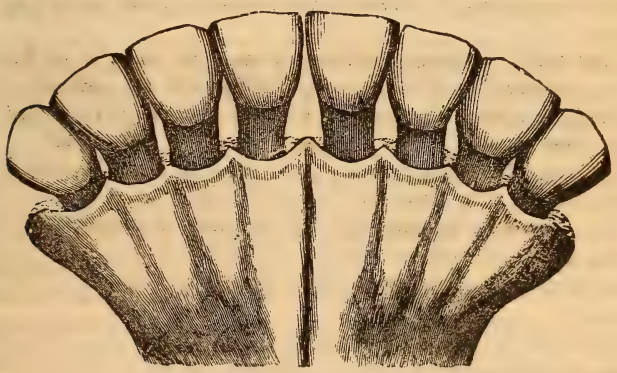
Fig. 27.



TEETH OF A STALL-FED COW.

Commission as a fabricator of milk by chemical composition, as follows: sugar, roasted, imparted the yellow color; oil produced the fat; eggs gave an appearance of richness; starch was added to repre-

Fig. 28.



TEETH OF A GRAZING COW.

sent the caseine or curd; all that was necessary in addition was water. Other equally deceptive imitations are made by diluting good, or swill milk, and adding yolks of eggs, sheep's brains, flour,

subcarbonate of potash, and chalk. Although killing to small children, so much is not to be feared from these adulterations as from milk obtained from diseased animals. Cows are kept the year round in stables by many dairymen in cities, or adjacent thereto. By confinement, if not by bad food, they become diseased, just as men and women do when shut in from open air and exercise. Their diseases, as a matter of course, render their milk unwholesome and innutritious. When, together with confinement, cows are fed on still slops, their milk becomes actually poisonous. Some hard stories are related of New York dairymen, who, it is said, keep their cows closely tied up in sheds, and fed on still slops till they actually drop dead in their stalls. From the specimens of milk that I have seen in this city, and the dishonest character of many of those engaged in the milk traffic, I am not disposed to doubt their entire truthfulness.

The shocking consequences of such speculative recklessness falls with particular severity on the juvenile portion of a metropolitan population, and it is sad to contemplate that the perversity of man can lead him to the perpetration of such wholesale slaughter of innocent babes, who, by reason of maternal disability, are denied the nourishment of a mother's breast. But the cupidity of the unprincipled money-seeker knows no limit, and the fact that such impositions are practised, should lead the consumer to guard himself against them.

Pure milk is not congenial to every one. In some, by its dilution of the gastric fluids of the stomach, together with the resistant action of its oily property, the generation of vital electricity is impeded and drowsiness induced. This is especially so in a case of bilious predisposition. In others, who are predisposed to catarrhal difficulties, the caseine of milk increases slime, and tends to aggravate the complaint. But with the majority of people, milk is a highly nutritious drink, and when copiously added to tea and coffee, often renders these beverages harmless to those who otherwise could not use them.

Buttermilk may be used by many who cannot drink sweet milk. Most of its fatty matter has been removed by the churning process, and it possesses a great deal of lactic acid. In consequence of the presence of this acid, M. Robin, an eminent French chemist, recommends its use to keep the system free from clinkers. He says, "that the mineral matter which constitutes an ingredient in most of our

food after the combustion, is left in our systems to incrust and stiffen the different parts of our body, and to render imperfect many of the vital processes. He compares human beings to furnaces which are always kindled; life exists only in combustion, but the combustion which occurs in our bodies, like that which takes place in our chimneys, leaves a detritus or residuum which is fatal to life." This, he claims, the free use of buttermilk will remove; but as everybody cannot get buttermilk, I will add that good ripe fruit, with no taint of decomposition, will effect the same result, and make a better substitute for buttermilk for this purpose, than is usually concocted to represent sweet milk, for the purposes for which it is used.

Water is sometimes the cause of blood diseases. Not only does a considerable quantity pass through the system in some form, but much is retained temporarily, and its bulk fully replaced by the newly taken liquids when the old pass off. Nearly three-fourths of the weight of the living body consists of water. If good, pure spring water could be obtained in all parts of the world, it would be the healthiest drink for man. And so would it be, if nature were more bountiful in the distribution of such streams as the Croton, Cochituate, and Schuylkill of America; and the dashing rivulets which play in the mountains of Switzerland. But when the thirst can only be quenched by the muddy and sewerage waters of the Ohio, the Mississippi, the Thames, and Seine, pregnant as they are with the filth of cities, the soap-suds of washerwomen, and the decomposed matter of vegetables and dead animals, it is not strange that the vitality of the blood is impaired by their vegetable and animal exuviæ. Many of the denizens of Cincinnati, Louisville, St. Louis, New Orleans, London, and Paris, flatter themselves that their river waters, are wholesome! But it is a proverbial fact that every traveller must have a dysentery, or something approaching thereto, on initiating his stomach into the use of them. Like an unwilling slave, the system can after awhile be whipped into submission, but it reposes only long enough to collect in the blood sufficient impurities to revenge on the individual in the form of diarrhœa, or bilious, typhoid, intermittent, or yellow fever. Hence, together with bad diet, the frequency of these forms of disease in the cities mentioned.

Some of the residents along the shores of these rivers are aware of the injurious properties of their waters, and resort to rain water.

Unfortunately, they only "jump from the frying-pan into the fire." In the large cities designated, the air above is no cleaner than the streets beneath. It is the reservoir of the animal effluvia of crowded populations. The breath of thousands of diseased men and animals mingles with the rains as they descend, infecting them with their poisonous gases. I have no doubt that, in seasons of epidemics, the seeds of the prevailing diseases are often drank with water. Consequently, those who drink rain-water should first expose it for several days to light and air, and then to filtration. By these means it may be rendered wholesome, and better by far than the heterogeneous

Fig. 29.

NATURE'S BEVERAGE ON A FROLIC THROUGH THE HILLS.

compound of decayed vegetation, solution of dead horses and dogs, and the city slops, which flow in the channels of many rivers.

The well-water of limestone countries is productive of gravel and kidney difficulties, and causes the hair to become prematurely gray,

while in all new countries it is often rendered unwholesome from the drainage of decayed vegetation. The former is known by its hardness, and the latter by its peculiar odor, and frequent discoloration.

In Virginia, not far from Fortress Monroe, are "Juniper swamps," and from these swamps the water is extensively taken for drinking purposes. The color is nearly that of pale brandy, and the odor strong of juniper. If the reader should sail up the James River some day, he may be offered a goblet of it, and if so, do not refuse it, as it is regarded as wholesome not only by those who have been long in the habit of using it, but by medical men who have given its qualities some investigation. If not impregnated with any thing more deleterious than the leaves and berries of the juniper, the water may be regarded as a good diuretic, and would materially benefit tourists from limestone regions, or those from any part of our country affected with urinary affections, or uterine obstructions.

The United States are becoming noted for their mineral waters. The sulphur and other springs of Virginia, have been the resorts of the sick for many generations. The springs of Saratoga enjoy an enviable reputation not only in this country, but in Europe. New springs have been discovered in Vermont, also at Gettysburg, Pennsylvania. The springs of Avon are favorites with many, and there are other springs of more or less note in various parts of our country, all of which possess some merits as remedies for disease. The fact that they are medicinal, should lead to reasonable caution in their use. The visitors of these springs, generally seem to imagine that the more of these waters they can "worry down" in the course of a day, the more rapidly will they recover from some difficulty with which they are affected. With this excess, and in many cases the possible inadaptation of a certain water to the constitutional peculiarities of the patient, injuries instead of benefits are experienced. The advice of resident physicians should in all cases be obtained, as their observation in the use of these waters enables them to give directions which will the more likely insure success in their employment.

It may be thought that I am inconsistent in thus speaking favorably of mineral waters, by those who have read my essay on vegetable medicines. In that place I denounce mineral medication, but every rule has its exceptions, and I cannot but make an exception in favor of these remedies, "distilled as they are from the bowels of the earth by the hand of Omnipotence." They are the preparation of

no human chemist, nor can the most astute pharmaceutist imitate them exactly. Mineral waters are manufactured, and some of them pretty good imitations, but as well might the artificial-flower maker essay to manufacture a natural rose-bud, with its rich colors and delightful fragrance, as for the chemist to attempt to prepare a perfect imitation of any of our mineral springs.

Water which has been standing long in one's room is unfit to drink. It has absorbed the perspired and respired gases, and the colder the water, the more completely has it effected this. The disinfectant qualities of water by the absorption of deleterious gases, are so well known to intelligent people, that many keep vessels of water standing in their sitting or lodging rooms. Water which has remained all night in leaden pipes, becomes affected with the properties of the lead, and that which remains for a long time in a pump, with the impure gases of the atmosphere; and in both cases should be drawn off before any is taken for drinking purposes. Leaden pipes are chiefly used in cities, for conveying aqueduct water into the houses, and too much care cannot be taken, when no water has been drawn through the night, to avoid taking any that may have stood in the pipes during the interval.

Fig. 30

"THE OLD OAKEN BUCKET."

In summer, ice-water should be used with great caution, for if drank excessively, it causes irritations, and sometimes fatal inflammations of the stomach and bowels. I am satisfied that correct habits in drinking, would require the use of warm drinks in summer, and cold drinks in winter. It is undoubtedly owing to our tendency to invert almost every hygienic rule, that it has become the custom everywhere to resort to cool drinks during hot weather, and to hot drinks in cold weather. The temperature of the water taken inside, as well as that applied outside, should, as a rule having of course its exceptions, be made to correspond with the temperature of the atmosphere. Cold water should not be taken with the meals

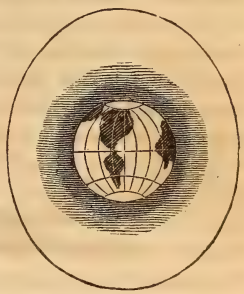
at all, for it chills the stomach, and retards, and sometimes arrests digestion. The colder the water, the more likely it is to do this.

Brook streams which have the appearance of purity, are not always safe to drink from, in consequence of the possible presence of dangerous animalculæ; many instances of frogs, evets, and worms, in the stomach have occurred in consequence of want of care in this particular. Those having their sources or channels near marshes, frog-ponds, hog-pastures, sess-pools, distilleries, poultry-yards, slaughter-houses, and saw-mills, may with good reason be avoided. Pedestrians, travellers, and sportsmen, when overtaken with thirst, should look for some farm-house, and regale themselves with a bowl of milk rather than suck in the waters of an unknown brook. Everywhere that good milk can be obtained, it may safely be regarded as the most wholesome and nutritious drink.

The Atmosphere we Live in.

It is estimated that each individual takes into his lungs annually about 800 pounds of air, and if the reader has observed in the preceding essays the amount of food and drink consumed every year by one person, it will be discovered that the aggregate amount of air, liquid, and substantial food received per year, by only one member of the human family, amounts in the aggregate to about one and one-half tons.

Fig. 31.



OUR PLANET, AND ITS SURROUNDING ATMOSPHERE.

The value of the air in nourishing the human system may be in a measure appreciated, when we consider what it may do in promoting the growth of a tree. Read the following narrative of an experiment, and the comments of the narrator: "Two hundred pounds of earth were dried in an oven, and afterward put into a large earthen vessel; the earth was then moistened with rain-water, and a willow-tree, weighing five pounds, was placed therein. During the space of five years, the earth was carefully watered with rain-water or pure water. The willow grew and flourished, and to prevent the earth from being mixed with fresh earth, or being blown upon it by the winds, it was covered with a metal plate full of minute holes,

which would exclude all but air from getting access to the earth below it. After growing in the earth for five years, the tree was removed, and on being weighed, was found to have gained 165 pounds, as it now weighed 170 pounds, and this estimate did not include the weight of the leaves, or dead branches, which in five years fell from the tree. Now came the application of a test. Was this all obtained from the earth? It had not sensibly diminished, but in order to make the experiment conclusive, it was again dried in an oven and put in the balance. Astounding was the result; the earth weighed only two ounces less than it did when the willow was planted in it! Yet, the tree had gained 165 pounds. Manifestly then, the wood thus gained in this space of time, was not obtained from the earth; we are, therefore, compelled to repeat our question, 'where did the wood come from?' We are left with only two alternatives—the water with which it was refreshed, or the air in which it lived. It can be clearly shown that it was not due to the water; we are consequently unable to resist the wonderful conclusion—it was derived from the air."

If air can make a tree, it can make or unmake man, according to its quality, for the lungs of the former (its leaves) are not so perfectly constructed for respiration as those of the latter; nor is its bark so pervious to the air as the skin which envelops the human body; and before the conclusion of this essay, I shall show to the reader that many derangements of the blood and nervous system arise from impure and unwholesome air.

As my views with regard to the influence of air upon the human system are somewhat peculiar, and a proper understanding of them necessary to aid the reader in readily comprehending many important points in subsequent pages of this work, I shall subserve both the purposes of this chapter, and many which are to follow, by a general treatise on the nature and effects of this wonderful element. Air is composed of 78 per cent. nitrogen, 21 per cent. oxygen, or electricity, nearly 1 per cent. of carbonic acid gas, and more or less vapor of water, according to its temperature. I am not alone in believing that oxygen is identical, or nearly so, with electricity; but if I were, my opinion would remain unchanged until some philosophical argument could be adduced to show the contrary. The origin and real nature of both are unknown, but certain it is, their effects are similar, and whatever difference is observable, may be occasioned by its com-

bination with other substances, for, according to generally received opinion, "Nature never presents it solitary." Still this view of the subject is not vital to the theory I am about to advance, for it is now universally admitted by scientific men, that electricity permeates every thing—the air around and above us, as well as the earth beneath our feet.

The quantity of electricity diffused in the air, exerts a potential influence on the health of man, and an excess of the element in the atmosphere is as injurious as a moiety. In dry and pleasant weather, the atmosphere usually possesses its normal share of electricity, but in rainy weather, it contains too much, and this remark is made with a full knowledge of the views to the contrary of some modern scientists. A popular writer and lecturer has undertaken to prove that the atmosphere is usually more negative in damp, or wet weather, than when it is dry or pleasant, and that the reason smoke so often descends when the air is filled with mists and rain, is because the smoke is positively charged with electricity, and the atmosphere, more negative than usual, attracts it, whereas usually, in dry weather, the air is positive, and repels it upon the well-known principle that two positives, or two negatives repel each other. Now, the generally accepted theory concerning the ascension and descension of smoke is, that it depends upon the density or rarity of the atmosphere. Smoke is composed of light carbonaceous particles and when the air is dry and dense, it naturally rises above it. When it is wet and rainy, the presence of so much hydrogen (the lightest of any known substance) renders the air lighter, and often so light as to cause the smoke to descend because of its greater weight. It is said in attempting to controvert this established theory, that smoke has been seen to fall when the barometer indicated more than half a degree above mean density; but this may have been owing to some local influence upon the barometer which did not affect the atmosphere when the smoke was observed to descend; or, it may have resulted from a defect in the instrument, or, still further, the smoke may have been influenced by local currents of air. But how is it proved that smoke is positively charged with electricity? The writer referred to says it is so "charged by combustion." How can this be, when smoke is only produced by fire in which combustion is *incomplete?* Let this question of smoke, however, "end in smoke," for it is not material, only in so far as its upward or downward

movement is instanced to show the electrical condition of the atmosphere. I believe it is not questioned that the air is more dense in dry than in wet weather, and it only remains for me to show that the atmosphere is more electrical on a wet day than it is on a dry one. To do this, it simply seems necessary to point to the effects observed upon telegraphic wires. It is only on cloudy, wet, or rainy days that telegraphic operators suffer much inconvenience from atmospheric

Fig. 32.

THE ELECTRICITY OF THE THUNDER-STORM.

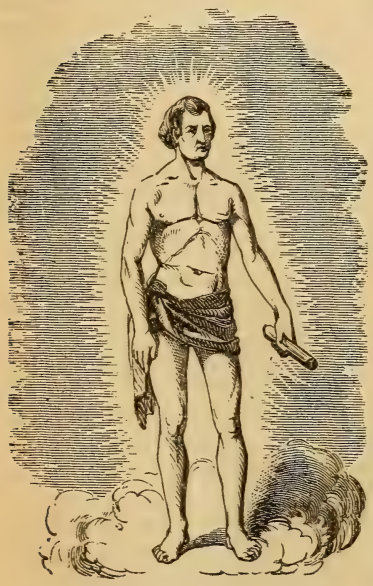
electricity, and when such weather prevails, they are sometimes knocked down by currents gathered from the atmosphere. Frequently they are compelled to suspend operations during a thunder-storm. Then, too, does not the lurid lightning, with its voice of thunder, often tell us of the greater presence of electricity when the sky is cloudy and the air loaded with vapor? Victor Hugo, in describing an equinoctial storm, says:—"The magnetic intensity

manifests itself by what might be called a fiery humor in the sea. Fire issues from the waves; electric air—phosphoric water. The sailors feel a strange lassitude. This time is particularly perilous for iron vessels; their hulls are then liable to produce variations of the compass, leading them to destruction. The steamer *Iowa* perished from this cause." When this undue presence of positive electricity exists, there are, undoubtedly, currents of negative electricity moving about to some extent, and it is the approach of positive and negative currents toward each other which causes the lightning flash, and the atmospheric concussion which conveys to the air the sound of thunder. But if the atmosphere, as a whole, were more negative, positive currents would not traverse the telegraphic wires, but would be absorbed or taken up instead of moving in accumulated bodies toward the operator's instruments; and if the air near the earth's surface were all negative, and that far above it all positive, then would occur a constant equalization, or blending of the two opposite forces without the violent hurling of lightning balls, whose movements are observed and mutterings heard during a thunder-storm.

I, therefore, repeat the proposition, that the air in dry and pleasant weather usually possesses the electrical element to a wholesome extent, while during wet and rainy weather, it contains an excess. When the weather is fair, the human system is relatively in a positive, and the air in a negative condition; that is, the former possesses more electricity than the latter. The result produced by this disparity between the body and the element which surrounds it, is a constant *radiation* from the former, or, in other words, a continual flowing off of the electrical element into the atmosphere, as represented in Figure 33. It is well known to physiologists, that when the pores of the skin are in a healthy condition, there is an incessant discharge from the skin of what is termed insensible perspiration; but nothing is said of the motive power by which the effete particles of the system are thus so wonderfully carried off. Now, if a doctor should retire at night with his garden strewn with filth and rubbish, and on arising in the morning should find the whole mass emptied into the street, he would naturally enough inquire who or what had removed it. Surely dead and waste matter could not remove itself. Strange it is, then, that the astute professors of anatomy and physiology have never thought to ask them-

selves how the corrupt particles of the system, day by day and year by year, during the natural life of man, are emptied into the great thoroughfare of life—atmospheric air. The pores possess no power in themselves to throw them off, and if, by the act of contraction, they should succeed in expelling these impurities, with no motive power to carry them away from the skin, the latter would daily become coated with the diseased exudations of the body. There are about seven millions of pores in the human body, and the quantity of useless matter that is daily discharged from them amounts to from *twenty to forty* ounces. The reader can see, therefore, how soon the avenues of the skin would close up, were the discharge of effete matter produced by merely a contracting process of the pores. Nature has manifestly employed a motive power, and this agent is the same which the mind of man uses in controlling his muscular organization, and the same, too, that the Almighty employs in moving and sustaining the planetary systems of innumerable worlds.

Fig. 33.



ELECTRICAL RADIATION.

It is found in cases of fever that the blood is overcharged with acid, and the fever is undoubtedly, in a measure, due to the presence of this. This excess may be easily explained. The excretions from the skin are acidulous, showing that electrical radiation, when active, relieves the blood and system generally, of all excessive acidulous accumulations, as well as waste matters. But when the pores of the skin are closed up by sudden exposure to cold, or taking cold, or the radiation is more sluggish by protracted wet weather, or a residence in a damp location, the acidulous and effete properties of the blood

and tissues do not pass off sufficiently, and the system becomes loaded with them, inducing fever or other inflammatory difficulties. Here we have physiological evidence of a too positive condition of the atmosphere in wet weather. The system, no longer electrically positive in its relation to the surrounding air, active, healthful radiation of electricity, with its loads of impurities, is partially or wholly suspended. It is under the influence of these conditions, that rheumatic and neuralgic invalids complain of increased pain, because the damming up of the impurities of the system promotes the accretions of acrimonious particles of matter which attach themselves to the living tissue and inflame it. The application of galvanism, or electricity, while this state of things exists, not only tends to detach the irritating particles from the parts to which they have adhered, but also has a tendency to throw the body into a positive condition, or in other words, to render it more electrified than the atmosphere, so that radiation of the impurities is partially resumed. No one feels as well on a rainy day, or living in a damp location, excepting those whose electrical conditions are abnormal, or whose fluids radiate too much to the surface, leaving the mucous membranes dry. Such, of course, feel better when the air is moist, and more strongly electrical, while catarrhal invalids, or those having excessive mucous secretions of any kind, are made worse thereby.

As a rule, having few exceptions, then, pleasant weather and dry locations are most conducive to health, because these conditions and circumstances promote the relative electrical condition between the body and its surrounding element, and are best calculated to keep healthfully active the electrical radiation which carries off the *rubbish* of those portions of the system not easily relieved by other depurating organs.

For other reasons, the air is not as wholesome in wet as in dry weather. When the latter prevails, the density of the air causes a rapid passing off of earthy, vegetable, and animal impurities, which, owing to their vapory form, rise with such rapidity, as to scarcely affect the air we breathe. But when it rains, the air being lighter, the gases of decaying vegetation and animal effluvia (which are also light) mingle with the air we breathe. A popular writer, who has said a great many good things, erroneously remarks as follows:—

"The amount of exhalation and effluvia which rises from the ground,

depends much upon the atmospheric pressure. When the air is heavy, these substances are, as it were, confined to their sources, that is, they are liberated at the slowest rate; but as the barometer falls, the pressure is taken off, and the miasmatic emanations rise much more rapidly."

A more palpable error was never uttered. It is contrary to the laws of gravitation. Investigate it in any way you choose, and you will find it wrong. If you suppose the miasmatic emanations *heavier* than air, they remain near the ground in consequence of their own *weight*. Suppose them *lighter*, and it is impossible for them to be held down by the *pressure* of the air, for the latter will then settle down under them, and *raise them up*. Whoever heard of putting a flat stone on water to hold it down? No, the quotation is absurd, and contrary to fact. Miasmatic emanations are lighter than air on a clear day, and rapidly rise above the strata of air we breathe; but on damp and wet days, when the air is also light, miasmatic emanations rise sluggishly, and mix with the air we breathe. From this it appears that nature sometimes disturbs one of the chief elements of life, a fact which rather disproves the writings of some people who assert that there is no reason why a person may not live on earth forever, if he strictly observes the laws of life and health. It is well enough to say that few people live as long as they might, for that is *true;* and I shall now proceed to treat upon matters relevant to this subject, which go to prove the fact. The atmospheric changes and conditions which we have thus far been contemplating, are not within the control of man.

If pains were taken to preserve the purity of the air we breathe, so far as it is within our power, health would be promoted and longevity increased. The venous blood which enters the lungs is in a negative state, and depends upon the oxygen or electricity of air to electrify it, remove its carbon, and perfect its arterialization. Hence, the air we inhale may contain its natural constituents in their due proportions, but that which we exhale contains almost the usual quantity of nitrogen, with eight or nine per cent. of its oxygen replaced with an equal amount of carbonic acid. The stomach, in the digestion of food, cannot produce all the electricity which is necessary to move the animal machinery, and therefore the lungs, with their curious mechanism, receive the blood from the venous system, and expose it to the electrifying influence of the atmosphere. I may

be asked why the blood is not like the body, electrically *positive* in relation to the air. I reply, that it is when it leaves the lungs chemically changed by its contact with oxygen; but in passing through the arterial and capillary systems, it distributes its electrical properties and returns through the venous system destitute of that element. Respiration is really governed by electrical laws in a measure, although mostly produced by the movements of the diaphragm, and contractions and relaxations of the walls of the air vesicles. Inflation is aided by the attraction the negative venous blood has for the electrical elements of the atmosphere, and exhalation, after the vesicles have expelled the air which has been used into the bronchial tubes, is aided by the attraction existing between the negative properties of the latter and the more positive properties of the former.

The lungs are very generous to the stomach. They keep up a necessary supply of electricity during the hours of sleep, when the digestive organs are permitted to take partial repose. Did ever the reader notice what long, deep inhalations a person takes while sleeping? While the stomach is enjoying rest, the lungs work their utmost to keep up a supply of vital electricity, and although they exhale the useless gases with the same rapidity that they do when the individual is awake, they draw in deeper and more copious draughts of the electrifying element. The stomach being on such amicable terms with the respiratory apparatus, and having made such excellent arrangements with it to aid in doing its work during the hours of partial repose (for the stomach never sleeps soundly), the reader can see how wrong it is for him to give his stomach a job of work to do on going to bed by eating a late supper, and that he has no right to complain if the digestive organs refuse to do the work, but allow the food to ferment, and fill his blood and brain with inflammation. When the stomach has such perfect confidence in the integrity and industry of the lungs, it is also wrong to oblige the latter to cheat the former by going to sleep in badly ventilated rooms, or where malaria exists, by which the blood becomes poisoned instead of arterialized, and the stomach finds its work not only undone, but itself disqualified in a measure to resume its labors. Facts go to prove that there is a greater proneness to disease during sleep than in the waking state. In Turkey and Hindostan, if a person falls asleep in the neighborhood of a poppy field, over which the wind is blowing toward him, he is liable to "sleep the sleep which

knows no waking." The peasants of Italy, who fall asleep in the neighborhood of the Pontine marshes, are invariably smitten with fever. Even travellers who pass the night in the Campagna du Roma invariably become more or less affected with the noxious air. Commercial men often conduct their business affairs in unwholesome locations in cities, but maintain a fair degree of health by having their residences, and sleeping, in healthful neighborhoods. The man whose business calls him into marshes and swamps during portions of the day, and sleeps upon the hill-top, may avoid chills and fever with which the inhabitants who lodge in proximity to those marshes are affected.

The reason of this, after what has been said, must be obvious. The stomach battery having partially suspended operations in sleep, the lungs redouble their efforts to inhale the life-giving properties of the atmosphere. In malarious or unwholesome localities they unfortunately receive them most poisonously adulterated, and the various organs of the system, if not murdered in their slumbers, awaken to find themselves invaded by a destructive foe. An English traveller in Abyssinia has asserted that he could live in health in that sickly climate, by a proper selection of the situation where he slept every night.

All this argues the deleterious effects of late suppers, as well as the necessity of well-ventilated and healthful sleeping apartments, and people who complain of ill health while they persist in the former, and take no pains to secure the latter, are as foolish as the boy who thrust his hand into hot embers and then cried because it was burned. Let those who sleep in small rooms, with windows and doors closed, remember that every individual breathes, on an average, from 13 to 20 times per minute, and inhales from 13 to 40 cubic inches of air at each inspiration. Now take, as a low estimate, the consumption of air at 20 inches, and the number of inspirations at 15, and we find that in the space of one minute, 300 cubic inches of air are required for the respiration of one person, during which 24 cubic inches of oxygen are absorbed by the blood, and the same amount of carbonic acid given out. Proceed with this estimate, and we find that in one hour, one pair of lungs have consumed 1,440 cubic inches of oxygen, and in seven hours, the time usually allotted to sleep, 10,080 cubic inches of oxygen have been replaced with an equal quantity of carbonic acid. The deadly effects of the latter are

illustrated by the fact that a canary bird, suspended near the top of a curtain bedstead where persons are sleeping, will almost invariably be found dead in the morning. It has further been demonstrated that when there is six per cent. of carbonic acid in the air, it is rendered unfit for the support of animal life, and half this proportion would put out the light of a candle. In view of these facts, how many churches, school-houses, places of amusement, factories, workshops, and dwelling-houses are but the nurseries of disease. Nor is it surprising that such a great majority of tombstones in our cemeteries are inscribed with ages below two score.

Some physiological writers have said that scrofula is often *produced* by bad air. That it is rendered contagious through the medium of the air is certain, but I am hardly inclined to believe that the disease would directly arise from breathing the atmosphere of a crowded room unless there were persons in the apartment affected with it. Scrofula and all diseases are rendered, in a measure, contagious by the diseased animal vapors from the lungs and pores of persons affected with them. These vapors mingle with the natural ingredients of air in a confined room, and are conveyed to the blood of others through the respiratory apparatus, and hence, impure air may, in one sense, be said to produce Scrofula. Certain it is, that it will convey the disease to those not affected with it, if it is rendered impure by the presence of scrofulous persons. Every man and woman is constantly perspiring or radiating from the skin, and exhaling from the lungs, waste animal matter, and if a person is diseased, these vapors partake of the nature of that disease.

Inasmuch, then, as there are at least five diseased persons to every ten sound ones, in every community, the reader can see how liable he is to contract disease in a crowded lecture or show room. The best ventilation does not render us entirely safe, but improper ventilation makes the spread of disease positively certain. Prof. Faraday gives his experience regarding the atmosphere of crowded rooms, as follows:—

"Air feels unpleasant in the breathing cavities, including the mouth and nostrils, not merely from the absence of oxygen, the presence of carbonic acid, or the elevation of the temperature, *but from other causes depending on matters communicated to it from the human being.* I think an individual may find a decided difference in his feelings when making part of a large company, from what he does when one

of a small number of persons, and yet the thermometer give the same indication. When I am one of a large number of persons, I feel an oppressive sensation of closeness, notwithstanding the temperature may be about 60° or 65°, which I do not feel in a small company at the same temperature, and which I cannot refer altogether to the absorption of oxygen, or the exhalation of carbonic acid, and probably *depends upon the effluvia from the many present;* but with me it is much diminished by a lowering of the temperature and the sensations become more like those occurring in a small company."

If mankind were generally aware of the effects of the diseased radiations and exhalations of invalids, popular lecturers and preachers, and favorite dramatists, and negro dancers, could hardly induce the convocation of the crowded audiences that they now do, and people would be as particular in the air they breathe, as in the water they drink. The use of stagnant waters could not be more deleterious to the nervous and vascular systems than the inhalation and absorption of vitiated air. Still, most people are regardless of the latter, while they throw out with disgust a glass of water which has odor, sediment, or color. And how many fastidious men and women, would suffer almost any punishment rather than go in bathing in a bathing-house, crowded with all sorts of people as thick as they can stand or swim. They would consider the water unfit to enter, and so with reason they might think, but these same persons do not seem to imagine when in a crowded, and even odorous car, omnibus, or lecture-room, that they are in fact bathing in the same air with all the individuals they are crowded with, and not only that, but breathing it, too. Your clothing does not protect your skin from the effluvia passing off from the besotted and tobacco-saturated man who sits against you on one side, nor your veil from breathing the same air which has been inhaled and exhaled by the woman with decayed teeth, catarrh, and bad breath on the other side. Men returning from their business, and women from shopping, do not seem to realize that they bring home with them in their parlors some of the essential parts of men and women whom they would not allow to enter their back doors. This is no fling at poor people, but at those whose habits and dissipations have rendered them not only filthy, but diseased. It is, indeed, amusing sometimes to see how an aristocratic individual will turn his or her back upon, or leave a seat contiguous

to some plainly dressed person, though the latter be glowing with health, and seek contiguity with quite an opposite character, whose countenance bears every evidence of disease, but whose physical infirmities are almost concealed by the tailor, or dress-maker, and the perfumer. Better at any time seat yourself in public vehicles beside men whose clothes are soiled with honest labor, but whose skins are red with the glow of health, or next to women in plain, cheap calico, with vivacity in their eyes, and sweetness in their breath, than to haughtily squeeze yourself between two well-dressed invalids. The former impart to you the magnetism of health, while the latter absorb your vital magnetism, and corrupt the air about you. By one, your stock in health is enriched; by the other, it is impoverished. Fish swim in water—you swim in air; look out for its purity. And parents, have an eye to your children who rely upon your judgment and care. Horace Mann, alluding to ill-ventilated school-rooms, said—"To put children on a limited supply of fresh air is as foolish as it would have been for Noah during the deluge to put his family on a short allowance of water. Since God has poured out an atmosphere of fifty miles deep, it is enough to make a miser weep to see our children stinted in breathing."

As for the great body of animal effluvia poured into the atmosphere by our numerous and sickly human family, nature has provided a neutralizer. The electrical scintillations which are often observed on warm evenings, and the more powerful currents which rend the atmosphere during a thunder-storm, produce an element called ozone, and this neutralizes those properties in the atmosphere, the accumulation of which in time would destroy animal life. All have observed how refreshing the air is after a thunder-storm. Not only has the air returned to a healthful electrical condition, but it has become permeated with vitalizing ozone. A few hours before it was stagnant and debilitating; your skin was relaxed and gluey to the touch; you felt languid and spiritless, but now you feel as refreshed as a child from a bath. This change has been produced by ozone. If the air be deprived of it for a great length of time, sickness becomes prevalent, particularly that which is characterized by fevers; and epidemics, if present, rage with fearful fatality. Thus when nature has provided an element for disinfecting the great body of the atmosphere which surrounds our planet, and arresting the spread of pestilence, each individual should put forth some personal effort to pre-

serve the purity of the air which immediately surrounds himself, and to protect the helpless and inexperienced from unnecessary exposure to diseased effluvia and poisonous miasma.

The introduction of stoves for heat has been as injurious to health as it has been universal. Air to be healthful must possess a certain amount of moisture (which is more electrical than dry air), to prevent a too copious radiation of the electrical elements and fluids of the body. The effect of stove heat, as every one knows, is to render the atmosphere dry. But if this were the only objection to the use of stoves, some means might be devised to overcome it. Says Professor Youmans: "While in point of economy stoves are most advantageous sources of heat, yet in their effects upon the air they are perhaps the worst. We saw that in the stoves called *air-tight*, the burning is carried on in such a way that peculiar gaseous products are generated. These are liable to leak through the crevices and joinings into the room. Carbonic oxide gas is formed under these circumstances, and recent experiments have shown that it is a much more deadly poison than carbonic acid. A slow, half-smothered burning of these stoves requires a feeble draught which does not favor the rapid removal of injurious fumes. Besides, carbonic acid being about half as heavy again as common air, must be heated 250 degrees above the surrounding medium to become equally light, and still higher before it will ascend the pipe or flue. If the combustion of the fuel is not vivid, and the draught brisk, there will be regurgitation of this gaseous poison into the apartments." The same writer continues: "Probably all stoves, from their improper fittings, are liable to this bad result. Hot-air furnaces also have the same defect. They are cast in many pieces, and however perfect the joinings may be at first, they cannot long be kept air tight in consequence of the unequal contraction and expansion of the different parts under great alternations of heat. Combustion products are hence liable to mingle with the stream of air sent into the room." Dr. Ure also remarks: "I have recently performed some careful experiments upon this subject, and find that when the fuel is burning so slowly as not to heat the iron surface above 250°, or 300°, *there is a constant deflux of carbonic acid into the room.*" From recent experiments of French *savants*, it appears that cast-iron stoves are more injurious to the health than those made of sheet or wrought iron. They say that under a certain degree of heat, cast-iron is rendered porous, or at least per-

vious to the passage and absorption of gases. They think they have been able to state the quantity of oxide of carbon which may transude from a given surface of metal, and have shown that the air which surrounds a stove of cast-iron is greatly impregnated with hydrogen and oxide of carbon. They also say that these cast-iron stoves absorb oxygen, thereby taking up the vital elements of the air at the same moment they are poisoning it by exhaling deleterious gases. M. Deville, at one of the sittings of the Academy of Sciences of Paris, warmly supported this view. In his lecture-room at the

Fig. 34.

YE OLD-FASHIONED FIRE-PLACE IN YE OLDEN TIME.

Sorbonne, he had placed two electric bells, which were set in motion as soon as hydrogen, or oxide of carbon was diffused in the room. During his last lecture, the two cast-iron stoves had scarcely been lighted when the bells began to ring. The credit is due to M. Caret,

one of the physicians of the Hotel Dieu of Chambery, for first calling attention to this matter. The more lately introduced arrangements for heating houses by steam are open to less objection than any other modern improvement. They produce a less dry warmth, and the pipes conveying the steam through the various rooms of the building, are not the conductors of unwholesome gases.

To warm an apartment, there is nothing really like the old-fashioned fire-place, and all who have ever had the felicity of warming themselves before it, will join with me in this assertion. The author of this work spent his juvenile winter evenings before the light and heat of this ancient device for keeping the shins warm. A fire on the hearth does not heat the air, but as a writer truly remarks, "*the heat rays dart through it* to warm any object upon which they may fall." The same writer continues: "The sun passes his floods of light through the atmosphere, without warming it a particle. Air is made to be *breathed*, and we again discover Providential wisdom in the arrangement by which the sun warms us, without disturbing in the slightest degree the respiratory medium. But if we heat the *air itself*, we at once destroy the natural equilibrium of its composition, and so change its properties, that it becomes more or less unpleasant and prejudicial to health."

Large, open grates for burning coal, are a very good substitute for fire-places, and should take the place of stoves, not only in dwellings, but in churches, theatres, and show-rooms, where the animal effluvia of a crowded assembly are sufficient to render the air vitiated, without the further addition of stove or furnace heat; but if economy will not sanction this, then let steam be introduced through iron pipes, so arranged as to distribute heat equally in every part of the building, and not make a volcano of fire in the basement to emit ashes and gases as well as scorched air in the apartments above.

Too much care cannot be taken for the maintenance of the natural purity of air. School-houses, churches, theatres, dwellings, and factories, should be daily aired, in cold as well as hot weather. The permanency of impure air in a close building, is forcibly illustrated in a recent account given in the *American Medical Gazette*, of the vault of the old cathedral church of Bremen. Hundreds of years ago, when the old church was built, the plumbers occupied the vault for melting and preparing materials for the roof, and since that time

its atmosphere has possessed the peculiar property of preserving from decay all bodies placed therein. That paper remarks:—

"Visitors are shown eight human bodies, besides a number of cats, dogs, monkeys, birds, &c., all of which, by mere exposure to this atmosphere, have become dried and free from all offensive effluvia; resembling in appearance coarse parchment.

"The body nearest the door is that of an English major, said to have lain there one hundred and eighteen years.

"The second, that of a German student, who lost his life in a duel. The hard, dry flesh, still shows the sabre wounds on his throat and arm. His body has been here one hundred and seventy years.

"The third, that of a Swedish countess, whose body has remained free from the lot of common mortals for one hundred and forty years.

"The fourth, that of a Swedish general, who was killed in the "Thirty Years' War," and whose throat still exhibits the mark of the wound of which he died.

"The fifth is that of his aid-de-camp, who lost his life at the same time, by a cannon-ball striking him in the side. The destruction of the parts is plainly visible.

"The sixth is that of a workingman, who fell from the steeple of the church when near its completion—four hundred years ago—and broke his neck. Owing to this accident, the peculiar properties of the vault became known; for the body of the deceased workman was laid in this vault for a few days, and, having evinced no signs of decomposition, the singularities of the fact induced the authorities to permit it to remain, and here it has remained during all that time.

"The seventh is the body of an English lady, who died one hundred and thirty years since of a cancer on the lower jaw; the ravages of disease are still perceptible in the ulcerated flesh.

"The eighth is the body of a working-man, who has lain here for sixty years.

"In a marble sarcophagus, standing in the middle of the vault, are said to repose the mortal remains of the Swedish Chancellor, Van Englebrechten; but they are not permitted to be exposed to public view, on account of some still surviving relative of the family.

"Each of these bodies retains to a great degree the appearance

peculiar to itself in life. Thus, the Swedish general was a short, round-faced man, inclined to corpulency; his aid-de-camp was a slender, well-proportioned man, in the prime of life. As in general appearance, so also in facial expression, do these bodies differ; the parchment-like skin, though drawn tightly over the bones, still shows something of the manner in which the muscles beneath once worked.

"No other part of the church possesses this peculiar atmosphere, and we can only suppose that the entire chamber became so surcharged with lead, that it has continued ever since to give forth vapors, which, forming an antiseptic chemical compound of lead, have operated upon the cadavera exposed to its influence."

Now this condition of the air is well enough for dead bodies, but baneful enough to live ones. Mechanics who work in metal can see from this, how prolific of diseases their workshops may become by being daily and nightly closed, as they frequently are in winter. There can be no doubt, too, that churches, closed up as they generally are, at the end of every Sabbath, retain a great deal of the diseased emanations of unhealthy visitors, which cannot be removed by a day's airing toward the end of the week when the sextons usually sweep and ventilate the buildings. Churches should, therefore, be aired immediately after, as well as just before the day for services, and an airing every day would be still better.

Those who are struck down by the hand of disease and marvel at the *cause* of their afflictions, because, perhaps, they have been regular in their habits of eating, drinking, and sleeping, may find in this essay a solution of the secret. That it may have a happy effect upon mechanics who build houses; upholsterers who furnish them; servants and housewives who have the care of them; the artisan in the workshop; the pale-faced woman in the cotton factory; the hotel keeper who entertains lodgers; the conductors of railways; the parson; the sexton; the dancer; street commissioners; the frequent visitors of cemeteries; and the mothers of young families, is the hope of the author.

The Clothes we Wear.

The human being comes into the world very rudely. He not only disregards the prevailing styles of dress, but unblushingly presents

himself with no drapery whatever. Nature persistently adheres to her vanity, and believes that "Nature unadorned is adorned the most," and consistently therewith thrusts both male and female babies into the world without clothing. This is very immodest on the part of old dame Nature, but as she is a very old-fashioned jade, and has more good sense than popular refinement, everybody puts up with her pranks in this respect, and the young mother who would run from a stranger, well enveloped in a clean night-gown, does not attempt to run away from the little stranger who comes to her without even a fig-leaf.

Fig. 35.

THE CLOTHES WE WEAR.

There is, however, quite a display of haste to wash the baby and dress it. If the poor little thing could be dressed comfortably, there would be no reason to complain of the proceeding, but mamma or the nurse has some extravagant notions as to beauty of figure, and instead of baby-clothes being put on to conform to the anatomical developments of the infant, it is expected that these will be made to conform to the notions of proud mamma, who calculates her baby shall be as pretty as anybody's. If the baby happens to be of the feminine gender, it is especially unfortunate in this respect, as well as in all others through life. It must have a small waist, whether made so or not, and its baby-clothes must be so pinned as to favor this conformation of figure. So, too, when the infant has grown to girlhood, her dresses must be made fashionably, and her body, by means of lacing, and other inventions, crowded into them, and she becomes so gradually accustomed to tight-fitting garments about the waist, that when she arrives at womanhood, nobody can make her believe she dresses too tightly. One obstacle which every sensible physician has to contend with, is to convince his female patients that they dress too closely about the waist. If he have the boldness to thrust his fingers under the belt or waistband, she has the presence of mind to suddenly exhaust the air from her lungs, and then insist that "it is not too tight, Doctor." Many women are honest in believing that they do not dress too closely, simply because they have become so thoroughly used to it. Had they never

been dressed unwholesomely in babyhood, and through succeeding years to adult age, and then the same dresses they are now wearing be put upon them, they would beg as piteously to be released, as if crushed beneath the ruins of a fallen building. A fractious husband could not be more inhumanly punished, than to be sentenced to wear for one week his waistcoat as closely fitted to his body as his wife habitually wears the waists of her dresses. It is something it seems almost superfluous to assure the reader, that tight clothes of every description are injurious. Knit shirts, knit drawers, tight stockings, tight garters, tight boots, close-fitting vests and waists, tight night-dresses, tight shoes, tight hats and caps, all tend to obstruct the circulation of the blood, and also the electrical radiation which carries off the impurities of the system; and females suffer other injuries from compressing the waist, which will be presented in another essay, where the evils of tight lacing will be referred to.

So long have the habits of close dressing been pursued, a very large proportion of the men and women of civilized countries may be said to be "hide-bound;" that is, the pores of the skin have become closed and gummed up by the exhalations of the skin, which have not been permitted to pass off freely and naturally.

It is perfectly astounding how fashion has knocked out the brains of people in regard to dress. When we consider that there is not any thing in the world so comfortable as comfort, is it not surprising that men and women will attire themselves with little or no regard to comfort during their conscious hours? Only when about to get into bed, and enter upon a season of obliviousness to all earthly woes, do they put on garments that admit of a fair degree of physical happiness; and how many fashionable women rush frantically to their chambers when they escape from society at the close of day, to relieve themselves of their uncomfortable costumes. If the "man in the moon" should be permitted to descend to this planet, entirely ignorant of the follies of the people of earth, it would be hard to make him believe that these discomforts were self-inflicted. Except for the fact the Divine mandates are seldom so religiously obeyed, he would imagine this self-torture to be decreed by Jehovah. Then the amount of fabric required for clothing a fashionable woman of civilization is truly appalling to herself if she is self-supporting, or otherwise to a husband, or father, of slender means. Some one has

suggested that the quickest way to make a fortune is to marry a fashionable young lady, and sell her clothes!

Look for a moment, too, at the bigotry of Fashion. Here sits an intelligent lady reading with surprise of the Chinese. The traveller in the narrative tells her that they wear tightly fitting wooden shoes to make their feet small and pretty! If she be of a sympathetic turn of mind, she is horrified, and "pities the poor things," and if she be mirthful, she laughs outright at the ridiculousness of the thing. But how about the Chinawoman; may she not be equally surprised, horrified, or amused, when she reads of this very same lady who has been dressed tightly about the waist from infancy, to give her what is called, a pretty figure? May be! Flora McFlimsy laughs at the idea that some women in barbarism wear rings in their noses, but in the very act of doing so shakes the glittering jewelry which hangs pendant from her own ears! It is said that, "a letter written more than thirty years ago, by Rev. Dr. Jackson, on the Vanity of Heathen Women, cited the fact as proof of their heathenish customs that the Karen women wore fancifully constructed bags, inclosing the hair, which they suspended from the back of their heads." Yet, this identical fashion, regarded by Dr. Jackson as one of the peculiarities of heathenism, was subsequently adopted by a majority of the women in civilized countries, and poetically called "The Waterfall!" Our aristocratic lady thinks the Indian squaw acts absurdly when she tattooes her skin to gratify the rude tastes of her warrior lover; but she does not hesitate to use paint and powder on her own face, and sometimes lavishly. The Hindoo women used to (and perhaps now do) paint their eyelids, and the cuticle around the eyes within a given boundary, with lampblack, much to the disgust of travellers in their country; but you may often see in Central Park, fashionable women with pencilled eyebrows, blackened eyelashes, and dark lines drawn under their eyes, to impart (as they think) brilliancy to the eyes! Much of this criticism I admit, does not apply to dress, but it does to the toilet, and it is presented here for the purpose of making the fair reader more tolerant of other, and perhaps more sensible people's tastes.

Thousands of sensible women would adopt what is called the "American," or "Bloomer Costume," were it not for the bigotry of fashion. They do not feel strong enough to face the ridicule of those who make themselves more ridiculous by trailing long dresses.

It is a pity that women who are conscious of the comfort, and greater healthfulness of the reformed costume, cannot be more independent, and those who are not, more tolerant. It is a pity that men who originally practised an act of robbery on women by usurping a comfortable style of dress, should not encourage the latter in reforming their costume. Perhaps the reader does not know that the women formerly "wore the breeches." A young Belgian writer—Miss Webber, has demonstrated that "the nether garment was first worn in a bifurcated form by the *women* of ancient Judah,—that the claim which man so pertinaciously maintains to the use of this garment, is purely arbitrary, without a solitary argument to support it—not even that of prior possession." As late as the 15th century, the petticoat was worn by both sexes. A gallant piece of strategy indeed for man to have caused the women of ancient times to allow them to adopt their comfortable costume, and then pass and enforce laws to arrest every woman caught in the street dressed in what they fraudulently call "male attire!" After having thus usurped the breeches, men (too many of them) are not willing to compromise with the originators of this most comfortable style of dress, and allow them to wear short skirts and loose pantaloons of a pattern by no means unbecoming. Think of it, that in the year 1866, a lady who had distinguished herself as a medical practitioner in the care of the sick and wounded in the Federal Army, during the terrible civil war which had but just ended, was arrested in the city of New York, because the senseless men and boys in the streets were noisily ridiculing her bloomer style of dress, which she had adopted and worn while acting the part of a humane physician in the hospitals and on the battle-field!

The health of women, too, demands reform in dress. The close-fitting waist and long skirt should give way to loose tunics, short skirts, and what are sometimes called Turkish pantaloons. I have already presented some objections to the close-fitting waist, and shall present others in another place. The physiological objections to long skirts may be briefly stated as follows:—they interfere with the free motion of the limbs, and make the exercise of walking exhaustive. Nervous force is absolutely wasted in the effort, and weakly or sickly women are thereby discouraged from attempting to move about to any extent, or sufficiently to preserve what little muscular strength they possess. Long skirts hang too heavily from the waist,

and generally with no support from the shoulders. They encourage women in dressing the limbs too scantily, rendering them more subject to cold extremities, and to attacks of cold. Dr. Harriet M.

Fig 36.

AMERICAN COSTUME.

Austin, speaking on this point, very truly remarks, that, "one of the great physiological sins of women is, that they cover the extremities of the body so poorly, that the circulation has to be maintained

at an immense waste of life. If the body is well clad over the whole surface, the limbs being dressed as warmly as the other parts, the external circulation is kept up with comparative ease, the blood passing through the capillary vessels readily; but when any part of the surface is inadequately covered, the blood has to be forced along at a disadvantage, and there is an unnecessary strain upon the vital energies. Neither men nor women, as a general thing, have any conception of the ill health which accrues to women from lack of sufficient clothing. Thousands and thousands of women go through life without ever being comfortably warm in the winter."

A female contributor to the "Herald of Health," gives her experience in regard to dress, in the following forcible language:—"In the customary dress of skirts and hoops, I am at once transferred to a state of the most thorough incapacity for all practical or sensible purposes; my spirit and ambition become as effectually snuffed out as a candle with a pair of snuffers; I have no power, either aggressive or defensive; am unable to resist the cold weather even, and feel like curling myself down by the parlor register in a state of the most approved flexible vapidity. But in the other dress, ambition, health, and spirits, are in the ascendant. Impossibilities become possibilities. I feel capable of meeting and conquering every difficulty that presents itself. Could face a northeast storm if necessary, and run ten miles—in fact, rather feel inclined to do it without the necessity. In short, inactivity in this dress is as impossible as activity in the other. There are, no doubt, hundreds of women in every city, who would send forth the most grateful thanksgiving ever uttered, could this dress be the prevailing one. But the great obstacle in the way is the fear of being conspicuous, of being the target of all eyes and all remarks, of being *alone in it.* Could these hundreds be united, and adopt the dress at the same time, it would remove the difficulty. Of all reform dresses, I think the poorest is the one with full skirt, reaching nearly to the ankle. It has neither the merit of good taste nor convenience. Skirts and pants do not harmonize. It will be found, in time, that every thing that does not meet the wants of the proprieties and conveniencies of life, violates the laws of good taste. Dangling skirts always do this, although partially abbreviated in length. The *partially* abbreviated one is more out of taste than the full length! Pants and skirts can never be made to chime. A sack, reaching only to the knees, and pants *à*

la Turc, or *à l'Américaine*, according to the taste, will be found the better dress, both as to good looks and convenience." This form of dress is illustrated in Fig. 36.

Not only do most females, who are smart enough to do their own thinking, advocate radical reform in dress, but in nearly all cases, women associated in numbers, where they are comparatively concealed from the gaze of the vulgar, carry it into practice. The ladies of the Oneida (N. Y.) and Wallingford (Ct.) communities, have permanently adopted the reform dress. In many water-cures, the female patients, either by the advice of the physician, or from choice, wear it. In gymnasiums, conducted on the system introduced into this country by Dr. Dio Lewis, and more largely patronized by ladies than by gentlemen, the skirts only reach to, or fall a little below the knees. In many a farm-house, hidden from the traveller by trees or growing crops, the sensible female inmates pursue their domestic avocations in a similar costume. It seems to me not a little unaccountable that every farmer's family, living secluded from observation, do not adopt the style of dress which will the best enable them to attend with ease to their avocations. The masculine portion usually do; but how is it with the wife and daughters?

It is a great pity that we go to Paris for our fashions. It were better for the health of women if we imported them from China, where the celestial women wear trousers and dressing-gowns; or from Japan, where they put on only silk or woollen coats and sandals; or from Persia, where they wear an open muslin chemise, over trousers, having the amplitude of a petticoat. The women of the village of Seroda, East Indies, remarkable for their physical beauty and fine complexions, dress with only a flowing robe "confined around the waist by a simple zone, and looped up on one side, so as to expose the leg a little above the knee." Europeans, and their American imitators, have ever been less sensible than what they regard as their semi-barbaric neighbors, in adapting costume to the physical requirements of the body, and the comfort of the individual. To reform, however, we need not copy them. Some of their styles of dress would not answer for our climate. We ought to be able to devise fashions ourselves, suited to our physical wants, and not go to Paris. Let our American women set the Parisians an example, which, when physiological knowledge becomes more general, their better sense may compel them to adopt.

Much has been said for and against low-necked dresses. In the early days of Pennsylvania, the law-makers took the subject in hand, and enacted—"that if any white female, of ten years or upward, should appear in any public street, lane, highway, church, court-house, tavern, ball-room, theatre, or any other place of public resort, with naked shoulders (*i. e.* low-necked dresses), being able to purchase necessary clothing, shall forfeit and pay a fine of not less than one, or more than two hundred dollars." It was, however, graciously provided, that women of questionable character, might go with bare shoulders, as a badge of distinction between the chaste and unchaste. It is astonishing how men are always interfering with women's attire by legislative enactment. Will the women retaliate when they have the ballot, and the law-making power? The style of dress prohibited by the early "Pennamites," is now fashionable at balls and parties even in Pennsylvania.

If both men and women could be induced to let the neck go undressed *at all times*, there would be less throat and pulmonary disease. The evil lies in sometimes dressing the neck warmly, and at others not at all. For instance, during the winter our fashionable women not only commonly wear high-necked dresses, but in addition thereto, fur capes and tippets. But you will meet the less sensible of them at some social gathering, with either no neck-dress at all, or with one made of some fabric of transparent texture. If they escape a cold after such exposure, it is altogether a miracle. It would be greatly to the advantage of people of both sexes, if they would toughen the neck like the face by exposure. But this can only be done by throwing aside all neck-dress at all times, both out as well as in doors. The fur capes of the women, and the fur and woollen tippets of the men, are a fruitful source of bronchial and throat difficulties. Many a disease of this kind may be cured by simply leaving off neck dresses. When considerable care is exercised, colds are contracted by tender throats and necks, made so by fur and woollen. When a lady or gentlemen enters the house, furs and tippets are laid aside, often when the temperature is colder in-doors with them off, than out of doors with them on. It is next to an impossibility to so manage such neck-dresses as to escape injury in consequence of this fact. Especially imprudent is it to put furs and woollens on the necks of children. It is actually "killing them with kindness." They are not, and cannot always be under the eye of an attendant,

and their little necks, made sensitive by such warm dressing, are affected in a moment by some unexpected exposure. They may

Fig. 37.

THE COSTUME OF A TURKISH FRUIT-VENDER.

even go out at times without their tippets, though carefully watched, and then mamma has no idea how Charley or Ida contracted those horrid colds. Would it not be well for those having the care

of children, and who are so careful to muffle them up when they go out, to give this matter a little serious reflection, and ask themselves when they have done the little folks all up so securely, whether they have any guaranty that they will return in the same condition. If not, are you not prepared to acknowledge with me that all this muffling is attended with injury, rather than benefit? You often wonder why the children of the poor do not more often die in winter from their exposure to the cold; but the cold seldom kills indigent children. Badly ventilated rooms in winter, and bad food in summer, make the mortality of this class greater; but they do not suffer with those coughs and colds, bronchial difficulties and snuffles, which affect the children of the rich.

The dress of men, since they drove the women out of trousers, and selfishly intrenched themselves in these convenient garments, is open to comparatively few objections. We might, however, learn something of semi-barbaric people in the way of dressing loosely. On page 121, we have a picture of a Turkish fruit-vender. At least two more pairs of brawny legs, with their haunches, could be easily stowed away in his loose breeches, and his sleeves, etc., correspond with the extensiveness of his nether habiliments. There is some chance here for electrical radiation to go on unobstructedly.

Dr. Frank Hamilton has made a fling at the costume of the men of America, which I shall quote here, for the criticism is worthy of consideration. He says: "We have adopted as a national costume, broadcloth—a thin, tight-fitting, black suit of broadcloth. To foreigners, we seem always to be in mourning; we travel in black, write in black, and we work in black. The priest, the lawyer, the doctor, the literary man, the mechanic, and even the city laborer, chooses always the same unvarying, monotonous, black broadcloth; a style and material which ought not to have been adopted out of the drawing-room, or the pulpit; because it is a feeble and expensive fabric; because it is, at the North, no suitable protection against the cold, nor is it any more suitable at the South. It is too thin to be warm in the winter, and too black to be cool in the summer; but especially we object to it because the wearer is always afraid of soiling it by exposure. Young men will not play ball, or pitch quoits, or wrestle, or tumble, or do any other similar thing, lest their broadcloth should be offended. They will not go out into the storm, because the broadcloth will lose its lustre if rain falls upon it. They

will not run, because they have no confidence in the strength of the broadcloth; they dare not mount a horse, or leap a fence, because broadcloth, as everybody knows, is so faithless. So these young men, and these older merchants, mechanics, and all, learn to walk, talk, and think soberly and carefully; they seldom venture to laugh to the full extent of their sides."

The invention and adoption of knit shirts and drawers have done much to destroy the purity of the blood, and the harmonious action of vital electricity. The use of flannel as an article of under dress, in changeable climates, is certainly commendable. But to obtain the benefit which wearers usually seek, *i. e.*, health and comfort, such garments must be made loose, and changed often. Red flannel, too, is better than white. There is something in the chemical qualities of the red coloring matter that seems to act healthfully, when worn next to the skin. People of a rheumatic tendency are greatly protected from attacks of rheumatic pains by the wearing of red flannel. Those who are susceptible to colds, are less liable to take one when red flannel is worn.

Knit shirts of whatever color usually set closely to the skin, and often draw so tightly around the chest as to prevent a free action of the lungs. I have had occasion to examine consumptive invalids who were hastening decline by wearing flannel shirts so closely fitted to them, that india rubber could not have been much more objectionable. When worn so closely to the skin, these garments tend to gum up the pores by pressing back upon them their effete exhalations. Flannel shirts should therefore be made up from the cloth, and loose enough to admit a free circulation of air between them and the skin. It is well to wear two, each twenty-four hours, laying off at night the one worn through the day, and laying off in the morning the one which has been worn during the night, so that the exhalations and impurities which may have been absorbed by the flannel, can have an opportunity to pass off.

In this connection I would not omit to warn invalids against the use of plasters. Almost daily am I consulted by those who have been in the habit of wearing them more or less for years. "But," says one, "they are recommended by my physician." Shame on your physician! If he knows the offices of the pores of the skin, he is guilty of willful malpractice; if he does not, he ought not to be your physician. I know that by thus speaking I shall incur the

maledictions of the "regulars," and not a few of those who call themselves "reformers," but what do I care—I have them already. There are said to be nearly *three thousand* pores in every square inch of the human body, and there are from seven to ten square inches in an ordinary sized plaster. Now think, for one moment, of the effects which must ultimately ensue from plastering up *twenty to thirty thousand* of those useful little orifices through which the electrical radiations of the system carry off the noxious and waste matter of the blood. True, you feel a temporary suspension of pain, but do you not know that skillfully prepared embrocations will produce this happy result as well, while they allow the machinery of nature to go on uninterruptedly? When an invalid comes to me plastered up from the top of his neck to the extremity of his spine, I am invariably reminded of the way in which some South Americans kill prisoners. It is at Monte Video, I believe, that they sew them up in a wet hide, leaving only the head and neck exposed to the vitalizing influences of the atmosphere. When the hide becomes dry it sticks just about as close as a "pitch plaster," and the unfortunate victim dies a slow, but excruciating death. Why, "Mr. Doctors" (as the Germans sometimes call the members of our profession), do you not know that the pores are of as much importance to the human system as the safety-valves to the steam-engine? The pores are actually safety-valves to the animal machinery, and the Divine architect has not made *one* more than is necessary. Do not, then, delude the suffering victim to disease, who has already more noxious and health-destroying matter in his system than he can carry, with the hope that a plaster can be of any possible benefit to him. If he has pains and you cannot cure them with unexceptionable remedies, pass him over to some of your brethren who can. "There is a balm in Gilead, and a physician there."

In speaking of the office of the pores, a writer remarks that the "Infinite care of the Creator is seen nowhere more conspicuously than in the admirable provision made for the removal of the waste matters from the system, the form in which they are expelled, and the prompt and certain means by which nature is ready to make them inoffensive and innoxious. The skin is not only, as Bichat eloquently observes, a sensitive limit placed on the boundaries of man's soul with which external forms constantly come in contact to establish the connections of his animal life, and thus bind his existence to all that surrounds

him; it is at the same time, throughout its whole extent, densely crowded with pores through which the waste substances of the system momentarily escape in an insensible and inoffensive form, to be at once dissolved, and lost in the air, if this result be allowed. It is not by the natural and necessary working of the vital machinery that the air is poisoned, but by its artificial confinement, and the accumulation of deleterious substances. If evil results, man alone is responsible."

Overcoats made of the skins of buffaloes are extremely warm in cold climates in winter, and rubber coats are protective in all climates in rainy weather, but garments of both descriptions are unhealthful, because their texture is of such a nature as to prevent the escape of the insensible perspiration. They are most undoubtedly comfortable for a day, but their injurious effects may last for a lifetime. For the same reason, india rubber, and patent-leather boots and shoes are objectionable. Those who wear either are not unaware of the excessive moisture of the feet when dressed with rubber or patent-leather, and that moisture is simply the dammed up waste fluids which have not been permitted to escape unobstructedly as nature intended. There are times and seasons when it may be the least of two evils to put on rubber sandals or boots in stepping out, but when such emergencies do arise the feet should be relieved of them as soon as possible after re-entering the house. Thick-soled leather boots and shoes are usually sufficient for any weather. The addition of a coating of oily blacking does not prevent the feet within them from perspiring naturally, or the exhalations from passing off freely, and at the same time does most effectually keep out water. Patent-leather is altogether worn for ornamentation, and not from any seeming necessity. The physiologist should, therefore, unqualifiedly denounce it as possessing no merit of utility, while it does possess the demerit of doing injury to the feet of the wearer. Rubber, patent-leather, close-fitting and insufficient dressings for the feet are in many instances the causes of colds, paralytic affections of the extremities, corns, bunions, etc.

Fig. 38.

THE VARIOUS INVENTIONS FOR THE FEET.

Men usually dress their feet more sensibly than women do. A lady, writing for the *Home Journal*, presents a criticism upon

this fact, and exclaims: "Look at their feet! You don't see one in a hundred venture forth in damp, chilly weather with a thin-soled cloth boot. No! They wear boots with thick soles and high heels: while, on the other hand, you will not see one woman in a thousand who, when the rain is not pouring, but when the pavement is only damp and cold, wears any thing thicker than a single-soled prunella gaiter! If you doubt my assertion, go look for yourself at thousands who walk in our crowded cities. Why is there such a difference? Is it that women are inferior to men in possession of good common sense; or is it they dress in this absurd manner to please the eye of man? If so, he must bear some of the blame, if, instead of boldly condemning their folly, he encourages them by admiring the beauty of feet dressed in this manner. Let fair women dress as they please in their warm houses, or in warm, dry weather, but for pity's sake, in cold weather, let them find something warmer than a boot which a strong, healthy man would not consider sufficient protection for himself from the dews of summer." There is a healthy reform in progress among women, having reference to the clothing of the feet, and the writer quoted is a little too sweeping in her assertion, when she says that not one woman in a thousand exhibits good sense in dressing her feet for damp and cold weather. But her complaint is well put, barring the extravagance of the statement. It is to be hoped that it will every year grow less applicable to women everywhere. When the public becomes sufficiently awakened upon subjects relating to physical health, no covering for a lady's foot will look so beautiful as a thick-soled shoe or boot.

Second-hand clothing is a medium through which many an aristocratic disease is conveyed to poor people. A wealthy invalid who gives his coat to a poor man bestows no blessing. No man can wear a garment for one week without imparting to it a portion of himself, and if he be diseased his garment is also diseased. A dog will recognize his master's clothes by the smell, and I have seen those whose clothes anybody with less acute olfactories could recognize by their odor. There is a perfectly simple and philosophical solution of this phenomenon. The electrical radiation of the impurities of the system, commonly known as insensible perspiration, enters the minutest threads of the cloth, and an old coat and pair of pants contain many ounces of waste animal-matter from the body of the wearer. Bring these in contact with the absorbing pores, and a person is at once

inoculated to a certain degree with the noxious matter contained in them. Syphilitic and other venereal diseases are frequently transmitted in this way, and other complaints, probably quite as often, only the latter are not as immediately detected as the former.

Persons should never wear their deceased relatives' clothes, unless they consist of articles which can be thoroughly washed, and then it is doubtful if they can be entirely cleansed of the diseased radiations which must have taken place weeks and perhaps months prior to the last sickness of the wearer. Although individuals of robust constitution often appear well till thrown at once on a bed of sickness, there are unhealthy conditions of the system which always precede acute attacks, and render the clothing unfit for the use of others.

Those, however, who are not disposed to be influenced by the objections herein presented, should have such clothing thoroughly scoured by the clothes-cleaner.

Shoddy clothes which are manufactured of people's old clothes, cast-off blankets, old carpets, worn-out stockings, flannels, tailors' scraps, etc., are liable to impart disease to the wearer. The process they pass through in the factory undoubtedly disinfects them to some extent, but there are some rags that no chemical agents can disinfect, and these may get upon the backs of the wearers of shoddy. Both in England, and in this country, shoddy is extensively manufactured. In this State alone there are six shoddy factories. Over fifty million pounds of woollen rags are annually made into shoddy in England. Now who supposes when there is such a demand for woollen rags, that small-pox, ship-fever, cholera, yellow fever, syphilis, and scrofula, can be kept out of shoddy? The great trouble is to detect this kind of cloth before it is worn; after it is worn awhile, the collection of short woollen rolls between it and the lining, betrays the character of the fabric. We need inspectors of rags. Will not our humane legislators protect us? If we must wear shoddy without knowing it, let us have its manufacture so looked after that we shall not wear on our backs any thing worse than the old stockings, under-garments, and blankets of invalids who have died of ordinary, non-contagious diseases, and of the old coats and trousers of decent living people.

Some philosophers and reformers have recommended a return to the fashion which the God of nature introduced before the fall of Adam, *i. e.* nudity. According to an account given in the *Dublin Evening Mail*, the experiment of ascertaining whether clothing can

be dispensed with, is actually being tried on a child in Ireland. That paper remarks as follows:—

"The subject of the costume of the ancient Britons has often been discussed; it has been asserted that they were naked. Those who opposed that view, adduced as reasons the coldness and variable nature of the climate. The question has been set at rest by an experiment which has recently been made on a child at St. Anne's, Blarney, near Cork. The child is 14 months old, and is the son of Mr. ——, who determined to ascertain what the human frame would bear. The child is perfectly naked night and day; he sleeps without any covering, in a room with the thermometer at 38 degrees; from this he goes into a bath 118 degrees; he sometimes goes to sleep in the bath; he is perfectly indifferent to heat or cold, is lively, active, cheerful, and intelligent; his appearance constantly reminds the observer of the best efforts of our best painters and sculptors. Therein is the *beau ideal;* he is the reality. His simple, natural, easy, graceful, and ever-varying postures are charming. He arrests the attention and commands the admiration of all who see him. The peculiar character of his skin is very striking; it is exquisitely healthy and beautiful. It may be compared to the rays of the sun streaming through a painted window.

"During the progress of the experiment he has cut three teeth without manifesting any of the disagreeable symptoms usual to children in that condition. He appears to be quite insensible to pain. Occasionally he has an ugly fall, but not a sound escapes from his lips. His manners, demeanor, and general behavior are equally striking. His mode of saluting a person is to take the hand in a graceful manner and kiss it. He is under the complete control of his father, and is perfectly quiet during meals, and also whenever he is told to be so. He goes about all day amusing and occupying himself in a quiet way. No one accustomed to children would know there was a child in the house. So incredible are these results that some of the residents of St. Anne's regard the whole matter with mingled feelings of horror, amazement, and wonder. He has two meals—generally boiled rice, which is put on a napkin on the ground, and he picks it up to the last grain. After that, wheaten flour cake with butter, and a cup of milk which he drinks. While eating his rice he looks a different being; there is at once a pride and an enjoyment of performance. He has the air of an orator addressing an audience.

"During the day he goes to sleep when he likes, merely lying down on the floor. The attitude he assumes in sleeping is that of a Mussulman making prostrations—on his knees with his hands spread out before him, which could not be if he suffered from fatigue; but his muscles are too hard for that. By this means he concentrates the caloric in his stomach, and so it is indifferent to cold; however cold, the limbs (and they get frightfully cold to the touch) are never numb, being, on the contrary, mottled red; the loins are always warm. The problem he presents physiologically is this; a development of the nerves producing pleasurable sensations, and a corresponding deadening of those of the contrary. The intensity of the enjoyment which he derives from contact with the skin, is only equalled by the insensibility of the flesh. We have never known him since his exposure to extreme cold to cry from pain."

This appears like a cruel experiment, but I question whether that parent inflicts as much suffering on his child as the majority of parents do on their children by loading their little bodies with unnecessary, and too close-fitting raiment; and, I further question, whether this child in a state of nudity may not grow up with a far better and healthier physical organization than will any of his little mates in clothes. The experiment, so far, is really a triumph, and after all, only proves what physiology, deeply studied, teaches. It is quite a mistaken notion that a great amount of clothing is necessary for comfort and health in cold weather. The ancient Spartans, who were distinguished for their physical power and beauty, were allowed but scanty clothing in childhood, even in the depths of winter. Our extreme sensitiveness to changes from heat to cold, is merely the result of tenderness induced by long habits of pernicious dress.

In conclusion, I would say, that if costume is indispensable, there are three rules to be observed to secure that which is healthful, viz.: First, cover no more of the body than the dictates of common modesty require, and let the covering be equally distributed. Second, let the clothes be made of entirely new material, and of such as will allow the uninterrupted egress of the bodily impurities, and the ingress of the vitalizing properties of the air. Third, mantua-makers and tailors must make clothing to hang loosely about the body, and shoemakers must be instructed to make the outer dressings of the feet with thick soles and easy uppers. When men and women become

wise enough to observe these, the adoption of the more primitive style of our first parents will appear less called for.

Bad Habits of Children and Youth.

Many of the blood and nervous derangements of adult age are but harvests of seed sown in childhood and youth. To begin with, the dietetic habits of children are entirely wrong. Indulgent mothers are mainly to blame for this. Many mothers imagine that they are greatly strengthening the little bodies of their babies by giving them the juices of animal flesh in the form of soup or broth, before they have teeth to masticate the flesh itself, and as soon as the masticating organs are developed, they are allowed the diet of an adult. Often, too, they are allowed stimulating drinks, such as tea and coffee, and in some cases even wine. Then, what lots of candy the little ones make way with from one Christmas-day to another. Colored candy eating is a habit in which many parents indulge children to an extent calling loudly for the warning of the faithful physician. The innocent darlings are almost ready to bound out of their shoes, when papa or mamma brings home from the confectioner a sweet little package of beautifully striped, red, blue, green, and yellow sugar-plums; of course they are, for they have the most implicit confidence in their dear parents, and know they will not give them any thing which will injure them! But parents may not know that there are fatal poisons concealed in the pretty spiral streaks which ornament the confectionery; papas are so absorbed in business and mammas in fictitious literature, it is a chance if either of them ever find it out. So long as no immediate fatalities occur to the little creatures, it is supposed that such indulgences are harmless. As in excessive meat-eating, and other bad habits, nature does not cry out at once, and as a consequence physical injury therefrom is not dreamed of. But ignorance does not shield the juvenile or adult from the deadly consequences of pernicious habits, which gradually undermine the constitution and induce premature decay.

Fig. 39.

THE LITTLE BAREFOOTED CANDY-EATER.

A brief specification of some of the drugs used for coloring candies, I trust, will suffice to show parents who peruse these pages, that however pretty sugar-sticks and toys are to look at, they are entirely unfit to enter the susceptible little stomachs of children. Reds are often obtained from red lead, vermilion or bisulphuret of mercury, bisulphuret of arsenic, iodide of mercury, and Venetian red. Greens, from false verditer or subsulphate of copper and chalk, emerald green or arsenite of copper, Brunswick green or oxychloride of copper, verdigris or diacetate of copper, mineral green, green verditer or subcarbonate of copper, and mixtures of the chromates of lead and indigo. Yellows, from gamboge, massicot, or protoxide of lead, the three chrome yellows or chromates of lead, yellow orpiment or sulphuret of arsenicum, King's yellow or sulphuret of arsenicum, with lime and sulphur, iodide of lead, sulphuret of antimony or Naples yellow, and yellow ochre. Blues, from indigo, cobalt, Antwerp blue, a preparation of Prussian blue, Prussian blue or ferrocyanid smalt and blue verditer or sesquicarbonate of copper. Litmus is also used in coloring blue, which, if unadulterated, is harmless; but it is frequently adulterated with common arsenic and peroxide of mercury. Browns are often obtained from umber and Vandyke brown, while purples are generally made by mixing some of the objectionable minerals used to produce other colors.

"It may be alleged by some," says Hassell, "that these substances are employed in quantities too inconsiderable to prove injurious; but this is certainly not so, for the quantity used, as is amply indicated in many cases, by the eye alone, is very large, and sufficient, as is proved by the numberless recorded and continually occurring instances, to occasion disease and even death. It should be remembered, too, that the preparations of lead, mercury, copper, and arsenic, are what are termed cumulative, that is, they are liable to accumulate in the system, little by little, until at length the full effects of the poisons become manifested." Continues Hassell:—"That deadly poisons should be daily used for the sake of imparting color to articles of such general consumption as sugar confectionery—articles consumed chiefly by children, who, from their delicate organization, are much more susceptible than adults—is both surprising and lamentable. It is surprising on the one hand, that the manufacturers of these articles should be so reckless as to employ them, and, on the other, that the authorities should tolerate their use."

Many confectioners do not sufficiently understand the chemical properties of the colorings they use, to know their poisonous effects. They have learned the trade of candy-making, but have never stopped to inquire into the nature of the articles used for ornamenting their pretty drops, sticks, and toys. For this reason, if no other, parents should not feed their children with colored candies. Those which are not colored will please the little folks quite as well, if they do not see the others.

Candies flavored with the ordinary essences, such as peppermint, wintergreen, lemon, sassafras, and rose, are also less hurtful than those which are flavored with almond, pineapple, and peach. The latter often contain fusel-oil and prussic acid.

From the foregoing remarks, the reader will see that cake ornaments, composed as they are, of colored confectionery, are equally objectionable, and should not be eaten by child or adult. If they are necessary as ornaments, no one is obliged to eat them.

I have perhaps said all that is necessary about candy-eating; but the evils of meat-eating and coffee-drinking by children have been but briefly alluded to in this place. These habits are such a prolific cause of sickness among the infantile portion of our community, I would urgently direct the attention of mothers to what I have to say on this subject in the chapter on the Prevention of Disease, where I speak of dietetics for young and old.

Fig. 40.

BAD POSITION IN SITTING.

At school children acquire many injurious habits, one of which is illustrated in Fig. 40. The effect of this posture is to cramp the lungs, thereby preventing the usual quantity of electrifying air from coming in contact with and arterializing the venous blood. It also curves the spine, the great nervous trunk, and in a measure interrupts the harmonious distribution of the nervo-electric fluid. Hence, both blood and nervous derangements are induced thereby. Parents and teachers are not particular enough in observing and criticising the posture of the schoolboy. Many a case of spinal disease and pulmonary consumption had

its origin on the bench of the school-room. Seats should always be provided with suitable backs for the support of the spine, and children should be required to maintain a correct posture.

A great error is generally committed by parents in sending their children to school at an age so tender that the development of the mental faculties seriously interferes with the vigorous formation of their physical parts. A child of three or four years of age, seated on a bench in school, is no more in his place than a twelve years' old boy would be on the judge's bench in a court of chancery. What does he care about letters or syllables? What he learns is not the result of a gratification of a thirst for knowledge, but of a severe and health-destroying discipline, which effects a forced growth of the mind at the expense of the body. The vital nervo-electric forces, withheld from the generous development of the chest, the vital organs, and the muscles, are consumed in nourishing and enlarging the brain. In art, mankind exhibit common sense. The master builder, who is about to decorate his grounds with a superb edifice, first lays a strong and perhaps inelegant foundation, upon which to raise the monument of his superior skill in architecture. So the parent, who wishes his child to occupy a commanding and useful position in society, when he shall have arrived at the stature of manhood, should take pains to secure for him a physical foundation which can firmly sustain the mental superstructure. To this end children should be kept out of school, and allowed to dig play-houses in the sand, play horse with strings, jump ropes, and roll hoops, until their little limbs become hard and chests broad, and, too, until they evince some desire for study. If this desire is manifested before the age of five or six, it should not be encouraged. The first six, and even ten, years of boyhood are none too long to prepare the physical trunk for the nourishment of mental growth. We once had in the United States Senate a man who was taught his alphabet by his wife after marriage. We have had, at least, two Presidents of the United States who hardly saw the inside of a school-room before they became old enough to work and pay for their own education. Nor are these isolated instances of final rapid mental progress of early neglected minds, after the bodies which nourished them had gained both strength and maturity. History is embellished with them. The great Patrick Henry was, mentally, a dull boy, and hated books, but when the flowers of his mental garden, enriched by the nutriment

of a strong and matured physical organization, did bloom, the whole country was intoxicated by their fragrance, inspiring the American patriots with an enthusiasm which naught but success could satiate. In the face of such facts, let not parents make intellectual prodigies and physical wrecks of their children. If they have the germ of greatness in them, there is no danger but it will become developed by the time society, the state, and the nation have need of them.

Going "barefoot," a very common practice among the children of the indigent in cities, and those of all classes in the country, is a common cause of blood diseases. In large towns the streets and gutters are the receptacles of filth of every description, a partial specification of which would embrace the diseased expectorations of men and animals, dead carcasses of flies, cockroaches, rats, and mice, killed by poison, poisonous chemicals and acids swept from drug stores and medical laboratories, filthy rags which have been used in dressing foul ulcers, mucus from syphilitic sores, etc., the bare touch of which is polluting. But when, as is almost daily the case, the barefooted urchin "stubs his toes" against a projecting stone, rupturing the skin, and then brings his bleeding feet in contact with this heterogeneous compound of mineral, vegetable, and animal poisons, the blood is sure to receive an impure inoculation which, unless eradicated by vegetable medication, clings to the individual through life, rendering him ever a susceptible subject for epidemics, colds, and chronic diseases. In villages, although less exposed to corrupt animal inoculations, barefooted children are liable to have the purity of their blood contaminated by contact with poisonous plants, which abound in country places. And merely a thoughtless gallop through stubble fields, where wheat or oats have been harvested, may impart to the blood of the barefooted child a humor which is sooner or later to cause his death. Because serious effects do not manifest themselves immediately, many parents flatter themselves that the practice is not attended with bad results. But blood impurities are generally insidious, and produce disease when it is least expected.

The following remarkable case of poisoning, by a bone, will serve to illustrate the danger of going barefoot. I will quote from a lady who wrote me upon the subject of her ill health. This is her narrative: "Up to my ninth year I was in perfect health, with the free use of every sense and faculty. At that time I stepped on a bone

while playing in the door-yard. It pierced the foot, but so slightly as to cause but little blood to flow. The hollow of the foot was the place injured, but no swelling or soreness ensued, excepting that it hurt me inwardly to walk on it. The third or fourth day a high fever made its appearance, and the tongue and lips commenced swelling rapidly. The throat swelled outwardly until nearly even with my chin, attended also with soreness inside. The poison went through my entire system, breaking out on my legs in large sores, which discharged freely. Disease seemed to affect alarmingly the whole inside of my mouth, physicians taking from my nose with instruments two large pieces which seemed like softened bone. Discharges from nose and ears were very free for months, and I became almost deaf for a year, mind almost destroyed, memory entirely gone, playmates, playthings, prayers, and every thing, all to be learned anew. Seemed to be nearly idiotic, laughing so long and loudly at the striking of the clock that the striking had to be stopped. During this sickness, which lasted nine weeks, I received no medicine, being unable to swallow any thing, only that which was forced down my mouth and throat with a feather. Death was hourly expected, often thought to be very near. My teeth all hung loose, my hands being tied to prevent me from taking them out. My tongue hung far out of my mouth, and that which remained in was so swollen as to nearly fill my whole mouth. You don't know how much I suffer in writing this terrible experience, and I will say no more." This bone was undoubtedly from some animal most thoroughly diseased, and this case may be presented as an extraordinary one. But milder poisons are received into the system by this same contact of bare feet with poisonous substances without producing such marked effects, and the sufferer does not think to attribute the difficulties with which he is contending to such a cause.

I do not believe God ever intended that every child should pass through the retinue of diseases which is considered the lot of childhood. All tender mothers appear to think that their children must have the mumps, hooping-cough, measles, and scarlet fever, and the sooner the "darlings" have them the better. Now is it reasonable to suppose that human nature requires these diseases as *settlers*, the same as coffee requires eggs or cod-fish skin? If children are brought up properly, they may escape all these diseases. What, with stimulating animal diet, poisoned confectionery, bare feet, and so forth, by

which the vital fluids of the system become rivers of death, can be expected but nursery diseases! *Corrupt blood* is that which renders the child a ready victim to a whole train of juvenile ills.

A habit which is considerably prevalent in almost every family, of allowing children to sleep with elder persons has ruined the nervous vivacity and physical energy of many a promising child. Those having dear old friends, whose lives they would like to perpetuate at the sacrifice of their innocent offspring, alone should encourage this evil; but every parent who loves his child, and wishes to preserve to him a sound nervous system, with which to buffet successfully the cares, sorrows, and labors of life, must see to it, that his nervous vitality is not absorbed by some diseased or aged relative.

Children, compared with adults, are electrically in a positive condition. The rapid changes which are going on in their little bodies abundantly generate, and as extensively work up, vital nervo-electric forces. But when, by contact for long nights with elder and negative persons, the vitalizing electricity of their tender organization is given off, they soon pine, grow pale, languid, and dull, while their bed companions feel a corresponding invigoration. King David, the Psalmist, knew the effects of this practice, and when he became old got young women to sleep with him that his days might be lengthened. Dr. Hufeland, the German physiologist, attributes the frequent longevity of schoolmasters to their daily association with young persons.

Invalid mothers often prolong their existence by daily contact with their children. I once knew a woman who, by weak lungs and mineral doctors, had been prostrated with incurable consumption. Her infant occupied the same bed with her almost constantly day and night. The mother lingered for months on the verge of the grave, her demise being hourly expected. Still she lingered on, daily disproving the predictions of her medical attendants. The child, meanwhile, pined without any apparent disease. Its once fat little cheeks fell away with singular rapidity, till every bone in its face was visible. Finally, it had imparted to the mother its last spark of vitality, and simultaneously both died. I saw it recently stated in a newspaper that a man in Massachusetts had lived forty-one days without eating any thing, during which period he had been nourished altogether by a little cold water, and "by the influences absorbed by him while daily holding the hand of his wife."

Many old men who marry young wives are aware of the nourishing effects of such unequal unions, and are not such "old fools" as many pronounce them, while the young women who become their wives are bigger "young fools" than they are ever reputed to be. Some old ladies, tenacious of life, and wickedly regardless of the welfare of others, often coax children or compel their servants to sleep with them. Parents, therefore, who feel that affectional devotion to their children which is usually instinctive, should exercise vigilance and protect their offspring from a robbery which can never be repaired. Great care should also be taken to have diseased and healthy children sleep in separate beds. Although the effect of putting them together is favorable to the former, it is attended sometimes with fatal and, nearly always, injurious results to the latter. It is better in raising a family of children to preserve in health a rugged child, even if its puny brothers and sisters die, than to distribute his full measure of vitality among half a dozen, and thus place him on a debilitated level with the whole. If, however, there be only one or two sickly ones in a large family of children, it may be an act of mercy to put them with the healthy group, for if the stock of health held by the rugged young members is fully average, they may bring the weakly ones up to their standard of health without perceptibly lowering their own. A group of vigorous children may also bring in from their out of door plays a surplus of vitality, which they may beneficially impart to a brother or sister confined to the sick-room. But in any family, unless a stock of health predominates among the children, the sickly ones will bring the more rugged ones down to their physical level unless parents exercise great care.

Masturbation, or self-pollution, is a prevalent vice among both children and youth. The amative passions prematurely developed by stimulating diet, importune gratification which cannot be granted in the manner prescribed by nature, because marriage is an institution fitted only for adults. Ignorant of the physiological effects of resorting to artificial means, and goaded to desperation by the perusal of popular romances, the unsophisticated youth falls an easy victim to a habit which taps the very fountains of nervo-vitality, and drains from the blood all its purest and most strengthening qualities. It has always seemed surprising to me how many parents allow their tables and book-shelves to become loaded with yellow-

covered, or equally pernicious literature, while they carefully exclude every book which treats on physiological matters. If Mr. Beelzebub should write out a prescription for the destruction of young men and women, and in its punctuation use a grave for a period, its adoption could prove no more fatal than has the prescription of civilization. Am I asked what this is? Then I will tell you. In utero-life, before the child has breathed the atmosphere of this world, the treatment begins. Excessive venery between the parents imparts to the unborn child a too great preponderance of the animal organs. After its birth, this excess continues, and, through the milk which it sucks from its mother's breast, these organs derive immoderate nourishment. Before the natural fountains are dried up, animal broths are introduced into its active little stomach, and ere it reaches the age of three years, it daily gluts itself with the diet of a full-grown man. Coffee and steak for a three years old child! Next, it is taught to read, and at the age of ten or fourteen years, while it feeds its stomach with highly seasoned meats and drinks, it quenches its mental appetite with fictitious romances. Is it strange then, that masturbation is a prevalent vice? Some may think it is not. This only proves lack of opportunities for observation, and want of ability to detect its effects upon those given to it. Five children in every ten over twelve years of age bear the marks which this disgusting vice stamps on the countenances of its victims. Children of both sexes are included in this estimate, although the evil is not so prevalent with girls as with boys. Should I speak of boys only, I would say seven of every ten were addicted more or less to it. The fatal consequences of masturbation are painfully apparent to every physician having a large professional correspondence, or an extensive practice in those diseases termed chronic. The habit acts slowly, but powerfully, in destroying the harmony of the nervous system, vitiating the blood, producing, ultimately, a great variety of diseases, according to the idiosyncracies of its slaves, but more commonly, consumption, mental depression, and insanity. I am daily written to by invalids in all parts of the country, who freely confess the cause which led to their ill health. I am also often called upon by persons of both sexes affected with diseases which I see, at a glance, are the direct or indirect products of the habit of self-pollution. Some candidly confess it at the outset; others stoutly deny it at first, but generally, the truth finally comes out by confession or

detection. Parents always (and very naturally) dislike to believe their children addicted to the vice. I was once called upon by a clergyman desiring to consult me about the illness of his daughter. I will not state when or where, or the nature of the difficulty with which his daughter was afflicted, as all consultations must be treated confidentially, and nothing be said by the physician to identify a patient alluded to by way of illustration. Suffice it to say, she was a pretty, blooming girl of education and refinement, with no mark of disease excepting one, and that was the result of nervous derangements, induced, as I readily perceived, by the unfortunate habit under consideration. My first thought was to communicate with her mother, but on inquiry, I found that she was deceased. On communicating my convictions to the father, he exhibited considerable indignation, and said that he knew better. I finally prevailed on him to present the matter to his daughter, and she became overwhelmed with mortification, and solemnly protested her innocence. The father censured me for my alleged erroneous and hasty diagnosis, and left my office, feeling himself aggrieved, and his daughter's sensibility outraged. But what better could I have done? Here was a disease produced and perpetuated by the habit of masturbation. All the medical skill in the world could not cure her, if she were not informed of the fact, and the habit discontinued. Not many weeks passed before my course was vindicated. The father called again, made humble apology, said the daughter's remorse for having told a falsehood had rendered her sleepless. She had confessed that I was right, and admitted that her indulgence was frequent. The result rewarded me for the course I pursued, for she gave up the habit, and recovered her health completely. The object of this illustration is to show how parents may be deceived, and how the protestations of a child in these matters cannot always be relied upon.

To show how enslaved a child may sometimes become to the habit, and how unable to relinquish it after its health-destroying consequences are discovered, a more appalling story may be related of a young man who fell into the vice. He consulted me at about the age of nineteen years, after he had become entirely impotent. At a very early age he commenced the habit of masturbation, and at fourteen, by some means, became aware of its injurious effects. He tried repeatedly to abandon the habit, but resolution was weakened by the effects the vice had produced upon his mind, and after

many attempts, and as many failures, he actually tried to castrate himself with a jack-knife. He succeeded in removing one of the testicles, but nearly bleeding to death, and fearing to make a confidant of any one, he desisted from completing the operation, and his habit continued to enslave him till he became impotent physically, and wretched mentally. In this condition, after having read some of my publications, he sought my advice, and confided to me what, if his parents had discharged their duty, would have been confided to them before he became such a wreck, if, indeed, under such circumstances, he would have contracted the destructive habit. If it were necessary, I could fill this volume with harrowing narrations of those who have consulted me in relation to diseases induced by solitary vice, but I trust what has been already related will suffice to make parents watchful. And let me advise young people of both sexes, struggling to overcome the habit, and suffering physically and mentally from its effects, to make confidants of their parents, if the latter have not made themselves unapproachable by their children, or, failing in courage to do this, to present their cases to some reliable physician.

Although physiological works generally fail to explain the reason why masturbation is worse in its consequences than sexual indulgence, most of them are good for something, because they serve as a warning to thoughtless youth. I have never, as yet, read a physiological or medical work, which exhibited the real difference between the effects of self-pollution and those of sexual intercourse. In fact, many young people, who have studied the writings of medical men considerably, have asked me why masturbation moderately indulged in is any more injurious than a natural gratification of the passions. This work shall not be incomplete in this particular; it shall not only sound in the young ear the tocsin of alarm, but give philosophical reasons why the former is positively deleterious, and the latter, in a measure, beneficial. Such an explanation, however, is reserved for Part Third, in which all matters pertaining to the amative passion and sexuality will be thoroughly discussed. Let all of both sexes, old and young, read it, for no one should hesitate to obey the injunction—"know thyself."

The juvenile feat of standing on the head, is quite extensively practised by school-boys without a knowledge of the injurious effects. I have seen urchins remain in an inverted position till the

blood appeared as if ready to gush out of their eyes and cheeks. One case of immediate death from this cause was lately given in an Illinois paper. The effect of the exploit is to impair the circulation of both the blood and nervous fluids, and congest the brain. On a par with this exercise, is that of turning around sufficient to become dizzy and fall down. Little girls are most addicted to this practice. It is injurious to the optic nerve, which is irritated by the sudden changes of objects passing before it, and also to the brain, whose function of distributing nervo-electricity to the system is partially suspended. A rapid spiral motion, in brief, tends to destroy the general harmony of the animal functions. School-teachers should have an eye to their pupils out of as well as in school, and discourage all practices so obviously injurious.

To make healthy men and women, an entire revolution is necessary in the training of children. Very few girls and boys, now-a-days, bloom into womanhood and manhood with healthy physical organizations. Some of the causes are indicated in what has been said in this essay. The principal errors in their training have been briefly alluded to, and a thousand minor ones cannot fail to suggest themselves to the experienced mother.

Bad Habits of Manhood and Womanhood.

It is a trite adage that "man is a creature of habit." Indeed, every man, woman, and child has habits of some kind, and nearly every person is addicted to what are called bad habits to some extent. It is a good habit to speak well of your neighbor, instead of saying hard things about him, even when he provokes you. It is a good habit to "do unto others, as you would have others do to you." It is a good habit to preserve personal cleanliness inside and out, by keeping the outer skin or cuticle free from all obstructing accumulations and excretions, and the inside skin, or mucous membrane, uncontaminated by noxious vapors, poisonous drinks, unwholesome food, excrementitious engorgements, and vitiated secretions.

Fig. 41.

SMOKING AND SNUFFING.

Every practice, indeed, which makes the conscience clearer, the mind happier, and the functions of the whole system more regular and thorough in their performance, may be put down as a good habit, and every practice producing an opposite effect may be denounced as a bad habit. It should also be borne in mind that what we may indulge in, or pursue occasionally with benefit, may injure us if it become a habit, and that self-deception is easy if wilful ignorance is encouraged.

Fig. 42.

A EUROPEAN TAKING HIS FIRST LESSON IN SMOKING.

One of the most prevalent of bad habits is the use of tobacco. This poisonous weed is extensively used by nearly every community of people under the sun. In New York City alone there are about two hundred thousand smokers, and nearly as many chewers of tobacco, to say nothing of snuff-takers. It is estimated that its citizens spend daily over ten thousand dollars for cigars, and less than nine thousand dollars for bread. The Europeans, and the present white inhabitants of this continent, borrowed the habit of

smoking of the aborigines of America, and the Asiatics somehow or other got hold of the trick themselves. Many fashionable ladies on both sides of the Atlantic smoke their cigarettoes, and a cigar dealer in Boston makes the astounding announcement that he sells an average of three hundred *cigars* daily for the use of the fair ones of New England. According to Johnson, every female in the big empire of China, "from the age of eight or nine, wears as an appendage in her dress a small silken pocket, to hold tobacco and a pipe." The Japanese also smoke, women as well as men. A majority of men all over the world smoke, or chew, and not a few boys follow their illustrious example. The poet, Milton, was a moderate smoker, and Lamb, at one time, carried smoking to a great excess. The latter in a letter to Wordsworth, said: "Tobacco has been my evening comfort and morning curse for these five years." The great preacher Robert Hall claimed to have adopted the habit of smoking to qualify himself for the society of a certain Doctor of Divinity (!) and finally he became so much of a slave to it, he found himself unable to overcome it. He thanked somebody who was trying to reform him for Adam Clark's pamphlet on "The Use and Abuse of Tobacco," followed with the exclamation—"I cannot refute his argument, and I cannot give up smoking!" A friend one day accosted him with—"Ah! I find you again at your idol!" Whereupon Hall responded—"Yes! *burning* it!" Sir Walter Raleigh who first appeared in England with a pipe of tobacco in his mouth, was said to have had a bucket of water thrown on him by his servant, who, seeing the smoke issuing from his mouth, supposed him to be on fire.

In portions of the Southern States, a practice called "dipping" is indulged in to a disgusting extent among women. A little mop is made, by mashing the end of a stick of pine, or some other soft wood, and with this instrument snuff is rubbed sometimes for hours at a time on the lips, teeth, and gums. A young miss in Arkansas died from the effects of snuff-dipping, she having fallen asleep with a mop in her mouth. "A post-mortem examination," remarked the newspaper, "revealed the fact that she had swallowed the juice containing a large quantity of nicotin, which is a deadly poison. Her lips, cheeks, and breast, were smeared with the foul stuff in her dying struggles alone in her room." This is shocking, to be sure; but many ladies and some gentlemen, who would be shocked to hear of a friend having contracted the habit of snuff-dipping, may be

caught snuffing powdered tobacco into their noses, if you watch them closely. By some microscopic distinction, not perceptible from a physiological stand-point, snuff-taking is considered more respectable than snuff-dipping, and yet, many American ladies, moving in fashionable society, are confirmed snuff-dippers. The gentleman who solaces himself with a fine Havana cigar, considers snuff-dipping and snuff-taking detestable—cannot imagine what makes women do such disgusting things! Meanwhile, another individual with a streak of tobacco juice in the corners of his lips, intrudes his presence, and argues (really with truth) that his habit is not so injurious as that of the smoker! Now, the long and short of the whole matter is this: tobacco is a medicinal plant, just as much as belladonna, stramonium, hyoscyamus, etc., all of which belong to the same order, and should not be indulged in by healthy persons any more than catharties and emetics. It is a very active narcotic and sternutatory, and should only be used by neuralgic and catarrhal invalids, or those troubled with constipation, and then only for a limited time, and by the direction of a physician. Its habitual use by healthy people, is attended with injury to the nerves and blood. The poisonous properties of tobacco are forcibly exhibited in the following extracts from a little work by Dr. Alcott, and from other publications.

"By the ordinary process of distillation, an alkaline principle in small quantity is obtained, called by chemists 'nicotin,' as well as an oily substance called 'nicotianine.' A drop of either of these, but especially of the former, is found sufficient to destroy life in a dog of moderate size; and two drops destroy the largest and most fierce. Small birds perish at the bare approach of a small tube holding it.

"There is another oil procured from tobacco, by distilling it at a temperature above that of boiling water, called *empyreumatic* oil. It is of a dark brown color and has a smell exactly like that of old and strong tobacco pipes. A drop of it forced into the lower portion of the intestine of a cat, causes death, in most instances, in about five minutes; and two drops, applied in the same way to a dog, are often followed by a similar result.

"The experiments on which these conclusions are based, have been repeated and verified, in this country, by Dr. Mussey. His subjects were dogs, squirrels, cats, and mice. The following are among the most important of his experiments:—

"Two drops of oil of tobacco, placed on the tongue, were sufficient

to destroy life in cats which had been brought up, as it were, in the midst of tobacco smoke, in three or four minutes. Three drops rubbed on the tongue of a full-sized young cat, killed it in less than three minutes. One drop destroyed a half-grown cat in five minutes. Two drops on the tongue of a red squirrel, destroyed it in one minute. A small puncture made in the tip of the nose with a surgeon's needle, bedewed with the oil of tobacco, caused death in six minutes."

"*Life Illustrated*" says,—"There is infinitely more poison in one package of tobacco than in the tin foil that surrounds hundreds. If anybody doubts it, let him but hold a sheet of white paper in the smoke that curls up from burning tobacco, and after a pipeful, or a cigar has been devoured, scrape the condensed smoke from the paper, and put a very small amount on the tongue of a cat, and he will see her die by strokes of paralysis in fifteen minutes."

Mr. Barrow, the African traveller, assures us that the Hottentots use this plant for destroying snakes. "A Hottentot," says he, "applied some of it from the short end of his wooden pipe, to the mouth of the snake while darting out his tongue. The effect was as instantaneous as that of an electric shock. With a momentary convulsive motion, the snake half twisted itself, and never stirred more; and its muscles were so contracted that the whole animal felt as hard and rigid as if dried in the sun."

"The tea of twenty or thirty grains of tobacco," says Dr. Mussey, "introduced into the human body for the purpose of relieving spasm, has been known repeatedly to destroy life."

Dr. Rush says, that even when used in moderation, "tobacco causes dyspepsia, headache, tremors, vertigo, and epilepsy." "It produces," he again says, "many of those diseases which are supposed to be seated in the nerves." "I once lost a young man," he adds, "seventeen years of age, of pulmonary consumption, whose disorder was brought on by intemperate use of cigars."

All empyreumatic substances impair digestion by interfering with the action of the animal matter, the pepsin, which is the principal solvent agent of the gastric juice.

Bishop Ames, of the Methodist Episcopal Church, recently expressed to the New England Conference his opinion that a large portion of the funds for superannuated preachers is paid to men mentally and physically disqualified by the use of tobacco.

Dr. Woodward, after presenting a long array of facts showing the

tendency of tobacco to produce disease—apoplexy, aphony, hypochondria, consumption, epilepsy, headache, tremors, vertigo, dyspepsia, cancer, and insanity—concludes with the following inquiry:—"Who can doubt that tobacco, in each of the various ways in which it has been customarily used, has destroyed more lives, and broken down the health of more useful members of society, than have been sufferers from the complaint in question (bronchitis), up to the present time, or than ever will be hereafter?"

Prof. Silliman mentions an affecting case of a young student in Yale College, who fell a victim to tobacco. "He entered," says he, "with an athletic frame; but he acquired the habit of using tobacco, and would sit and smoke whole hours together. His friends tried to persuade him to quit the practice, but he loved his lust, and would have it, live or die,—the consequence of which was, he went down to the grave a suicide." Prof. S. mentions also the case of another young man, in the same institution, who was sacrificed by the same poisonous weed. Prof. Pond, of the Bangor Theological Seminary, relates one or two similar cases of students whom he knew at Andover and elsewhere.

A distinguished medical man at Brighton, England, has given a list of sixteen cases of paralysis produced by smoking, which came to his own knowledge within the brief period of six months.

Fig. 43.

AN OLD TURK SMOKING HIS TOBACCO AND OPIUM.

Our "*Home Journal*" has gathered and contributes the following facts in regard to tobacco. "One of the members of the French Academy of Medicine, in a very elaborate paper, drawn up with great care, asserts that 'statistics show that in exact proportion with the increased consumption of tobacco is the increase of dis-

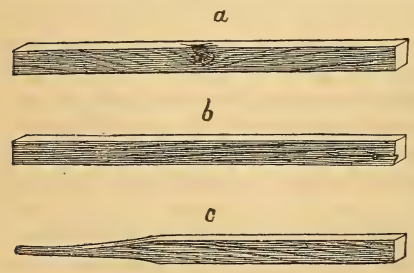
ease in the nervous centres (insanity, general paralysis, paraplegia), and certain cancerous affections.' It may be said in reply, that the Turks, Greeks, and Hungarians are inveterate smokers, and yet are little affected by these nervous diseases. But M. Jolly accounts for their exemption by the fact that the tobacco used by them is of a much milder form, containing slight proportions of nicotin, and sometimes none at all. Excessive indulgence, therefore, does no harm in this direction; and no case of general or progressive paralysis has been discovered in the East, where this mild tobacco is in use. M. Moscan says: 'The cause is plain enough, and evidently physiological. In all the regions of the Levant they do not intoxicate themselves with nicotin or alcohol: but saturate themselves with opium and perfumes, sleeping away their time in torpor, indolence, and sensuality. They narcotize, but do not nicotize themselves, and if opium, as has been said, is the poison of the intellect of the East, tobacco may one day in the West prove the poison of life itself. It is the nicotin, in the stronger tobacco used in England, France, and the United States, which proves so pernicious, and the French physicans hold that paralysis is making rapid advance under the abuse of alcohol and tobacco.'"

The German physicians state in their periodicals, that, of the deaths occurring among men in that country, between eighteen and thirty-five years of age, one-half die from the effects of smoking. They unequivocally assert, that "tobacco burns out the blood, the teeth, the eyes, and the brain." It has been observed, that the manufacturers of this article carry pale, ghastly countenances; and it is also said that few of them live to old age. Agriculturists say that it soon poisons the soil on which it grows, or rather, that it impoverishes the soil more than any other plant in the vegetable kingdom.

All the foregoing facts have been gathered up from various sources, and enough more might be presented to fill a volume like this. But there is one difficulty induced by tobacco which I have not seen other medical writers advert to. Tobacco is the cause of impotency among men. All violations of the laws of health exhibit their effects first upon the weakest parts of the system. Every individual has some part less able to resist disease than another, and as the procreative system, from childhood to age, is usually more abused than any other, not excepting that ever-to-be-pitied organ, the poor stomach, it is more liable than any other portion of the human ma-

chinery to suffer from the nerve-destroying effects of tobacco. To illustrate this proposition, let me give you in Fig. 44 a picture of three sticks of wood having weak points. The one marked *a* has a knot in its centre. A strain coming upon the stick will manifestly break it in two in the middle; *b* has a worm-hole near the right end, and any child would say that in bending it, if it breaks, it will give way where the worm has punctured it; *c* has been whittled down pretty small to the left, and here it will break when any pressure is placed upon it. Now we will call *a* a man with weakened procreative organs, *b* a person with a weak stomach, *c* an individual with contracted chest and weak lungs. The gradual use of tobacco will make *a* impotent, *b* a melancholy dyspeptic, *c* a victim to consumption. But, as before remarked, more have abused or neglected the organs of generation than have even injured the stomach, or lungs, and consequently, it is no uncommon thing for the physician to be called upon by athletic-looking smokers, chewers, or snuffers, who complain that they have lost all power in the genital organs. The effect tobacco had produced in these cases is made still more apparent when the reader remembers the *paralyzing* properties of the plant. Then again, let young men remember that in addition to impotency often resulting from the habitual use of tobacco, the beauty of the face is impaired by it. The "Scalpel" has presented this fact in language which I cannot do better than quote here: "Both smoking and chewing," remarks the editor, "produce marked alterations in the most expressive features of the face. The lips are closed by a circular muscle which completely surrounds them, and forms their plumpy fulness. Now every muscle of the body is developed in precise ratio with its use, as most young men know—they endeavor to develop their muscle in the gymnasium. In spitting, and holding the cigar in the mouth, the muscle is in constant use; hence the coarse appearance and irregular development of the

Fig. 44.



DEFECTIVE STICKS.

lips, when compared to the rest of the features, in chewers and smokers." It is not pleasant to think of becoming impotent and ugly, and still it is a more alarming reflection that so many people are poisoning themselves.

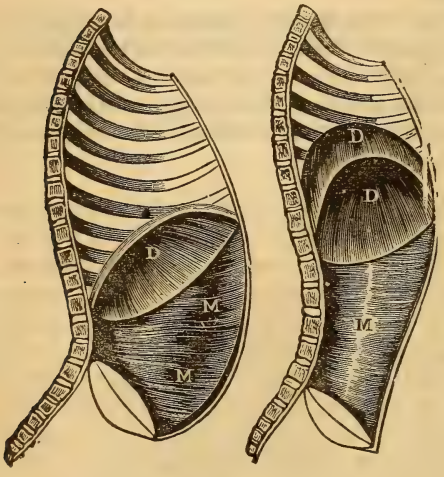
In some countries Indian hemp is the fashionable poison, in others the betel nut, and to sum up all, there are about three hundred millions of opium-eaters! Verily, it seems as if mankind were universally bent on self-destruction, and that those who put the razor to the throat are the impatient few who cannot await the gradual results of the popular methods of suicide.

The prevalence and fatal consequences of intemperance in the use of ardent spirits have been fully considered under the head of "The Liquids we Drink;" likewise the injurious results of excessive meat-eating under the caption of "The Food we Eat." It is only necessary to advert to them in this place, in order to remind the reader that there are other popular habits, equally as destructive to health as the use of tobacco. It is a peculiarity of human nature "not to see ourselves as others see us," and frequently the tobacco-chewer will upbraid his brother for drinking, and *vice versa*, and the excessive meat-eater moralize on both of these practices, while the pork-eater considers himself the very paragon of sobriety and Christianity. Probably two-thirds of the temperance philanthropists who are making such strenuous efforts to put down the rumsellers, are themselves constant patrons of the hog-butcher, and do not dream that they are inconsistent. By eating distillery-fed pork, they actually consume *second-hand liquor*, or in other words, eat it after the hogs have drank it, and still they would religiously refuse a piece of mince pie which was known to contain brandy. Now, my object in writing thus, is not to throw ridicule upon the philanthropic movements of the day, but rather to suggest for them a wider scope.

Bad habits in dress have been investigated under the head of "The Clothes we Wear," but as I declined in that place to treat of the evils of tight lacing, I will devote a little space to them here, inasmuch as it is a practice more destructive to health and longevity in fashionable circles than tobacco-chewing, liquor-drinking, or pork-eating. The ladies who "will not put their arms through rum-jugs" (as some have appropriately termed the elbows of liquor topers), must not

consider themselves immaculate, which they may be inclined to do, if one of their iniquitous habits is not exposed in this connection.

Fig. 45.



POSITIONS OF THE DIAPHRAGM.

One of the most injurious effects of tight lacing can be seen in noticing the peculiar office of the diaphragm as represented in Fig. 45; D D exhibit the diaphragm, and M M M the abdominal muscles. The first view represents the diaphragm as it appears when air is inhaled, the other as when the air is expelled. The diaphragm rises and falls to aid the lungs in inhaling vital air, and exhaling that which has been deprived of its electric property and loaded with animal effluvia.

How common it is for women to complain of *shortness of breath!* Strange it is that they do not know the cause, when they compress the chest so tight that the free action of the diaphragm is interrupted. Of over twenty thousand ladies whose lungs I have examined, at least seventy-five per cent. of them could expand the upper parts of their chest from one to three inches, by tape measurement, while the expansive powers of the lower portions were often less than half an inch, and seldom exceeded one. In those persons who have not habituated themselves to the wearing of tight clothes, the expansive power of the upper and lower portions of their lungs varies only about a quarter to half an inch, whereas, in fashionable ladies, it almost invariably varies from one to three inches. Any woman can try this experiment and convince herself, with a tape measure, placing it first around the chest immediately under the arms, and then to the lower extremity of the lungs. The experimenter, after adjusting the tape, should exhaust the air from the lungs and then draw the tape as closely as possible; then inhale. gradually allowing the tape to slip

through the fingers until the lungs are swelled out to their utmost capacity. The figures on the tape generally give a result which will convince the fair experimenter that she has been from childhood a constant violator of nature's laws.

The disturbance of the functions of the diaphragm is by no means the only evil of tight lacing. The circulation of the blood and the electrical radiations are impeded thereby, in addition to which there is a still greater and more alarming evil. I allude to the pressure which is thrown upon the bowels, and from the bowels upon the womb. The peculiar organization of woman renders the practice tenfold more injurious to her than it would be to the male. The shocking prevalence of prolapsus uteri, commonly termed falling of the womb, is greatly owing to the pernicious practice of tight lacing.

The greatest mystery to me is that women lace at all. A majority of them who do are members of Christian churches, and are instructed weekly from the pulpit that the works of God are perfect; do they then mean to willfully insult the wisdom of their Creator by attempting to improve upon them? Now this question is a poser to those who belong to the Church of Christ, but as a faithful physiologist I am in duty bound to ask it. The fact is, it is a mistaken notion that wasp waists are pretty. They look *perfectly horrible!* I would rather see a woman's waist as big round as a bushel basket than to see it contracted to a size a trifle larger than the neck. I am glad to see that many of the ladies themselves are beginning to regard small waists as physical deformities. One of them, a Mrs. Merrifield, speaks right out as follows:—

"The very expression 'a small waist' implies a disproportion. A small waist is too small for the general size of the figure to which it belongs, just as a low-pitched room or a narrow room is too low or too narrow in proportion to its height. A well-proportioned room has none of these defects, and the waist of a well-proportioned person should be in harmony with the other parts of the figure.

"The ancients do not appear to have recognized the virtue of small waists; and a modern lady would be in agony if her waist were of the proportional dimensions of those of some antique statues. The celebrated Venus de Medicis—'the bending statue that enchants the world'—has what would, at the present time, be called a *large* waist; yet modern connoisseurs and artists have unanimously de-

clared that this is the most perfect female form which the art of ancient or modern times has transmitted to us. They commend, not only the faultless shape of each part, but the admirable proportion of one part to another. Let us devote a short space to a few observations relative to the dimensions of the waist of this figure.

Fig. 46.

A CONTRACTED WAIST.

Fig. 47.

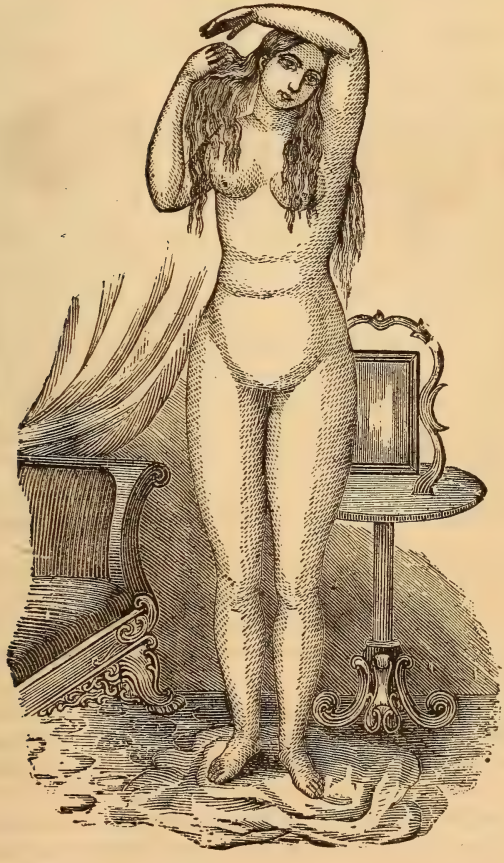
A NATURAL WAIST.

"The Venus has been frequently measured, and with great accuracy, by artists; but the view taken is a painter's view of a flat instead of a round surface; consequently, instead of the whole circumference of the waist, we have only its breadth from side to side, and from back to front.

"The whole figure is divided into seven heads and three-quarter parts; each head into four parts, and each part into twelve minims. The diameter of the waist from side to side is one head (or four parts) and eight minims, or nearly one-seventh of the entire height; the diameter from front to back is only three parts and seven minims: it is, therefore, nearly one-fourth longer in one direction than the other. This is the first point in which fashion is at variance with the finest forms of nature and art. Fashion requires that the waist shall be round instead of oval, and she attains her object by compressing the lower ribs, which are forced closer together. To such an extent is

this construction sometimes carried, that the impression of the ribs is left permanently upon the liver.

Fig. 48



A PERFECT FEMALE FIGURE, AS DESCRIBED BY MRS. MERRIFIELD.

"But it is not sufficient that the waist should bear a due proportion to the height, it must also be proportioned to the breadth of the shoulders. Now, the Venus is just two heads, three parts, and eight

minims across the shoulders—exactly half a head more than the diameter of her waist from side to side. When, therefore, there is more or less than half a head proportionate difference between the breadth across the shoulders and the waist, the figure is deficient in just proportion. It is to be observed that some individuals are tall and slight, others short and broad; in all cases, however, there must be a corresponding agreement between the breadth of the shoulders and that of the waist.

"As we know the two diameters of the waist, we are able to calculate the circumference, which is equal to three heads and four minims, or somewhat more than two-fifths of the entire height. We shall assume this approximation to be correct. Now, the real height of the Venus de Medicis being four feet, eleven inches, and two lines, and her proportionate height seven and three-quarter heads, the proportionate circumference of her waist, being three heads and four minims, is equal to twenty-four inches, eight minims, more than two-fifths. It may be considered, then, that a well-proportioned waist should be *at least* two-fifths of the height of the figure: whatever is smaller than this, is disproportioned. According to this scale, therefore, the waist of a person five feet three inches high should not be less than twenty-five and a quarter inches; of five feet five inches, twenty-six inches; of five feet seven inches, twenty-six and three-quarter inches; of five feet eight inches, twenty-seven and a quarter inches.

"We have heard of a young lady of the middle height, or perhaps somewhat under that standard, who found fault with her stay-maker for having made her stays nineteen inches round the waist, when she knew that the young lady's measure was eighteen inches! Eighteen inches! According to scale of two-fifths of the entire stature, which, as we have seen, is under the mark, the height of a young lady whose waist did not exceed eighteen inches, should have been *three feet nine inches!*—the height of a child, with the proportionate of a woman.

"Enough has been said," concludes Mrs. M., "to convince our readers that a very small waist is a defect rather than a beauty, and nothing can be truly beautiful which is out of proportion. Would that we could also convince them that they cannot possess an excessively small waist without the certain sacrifice of their health!"

Would that the female portions of civilized society were made up of Mrs. Merrifields, and my word for it, men would have merrier and more beautiful wives, and healthier children. I have never had the pleasure of seeing Mrs. Merrifield, and know not if she is pretty or ugly, but if, by any possibility, she be the latter, her offspring cannot fail to be both handsome and healthy, as a reward to the mother for her obedience to nature's laws.

In the next place I should treat of some of the pernicious habits of married people, in their private relations, were it not for the fact that extended remarks on these will be given in Part Third. They might with propriety be introduced here, for they are common causes of nervous and blood derangements. But the consideration of all matters relating to marriage, its excesses, etc., will be deferred for the place specified.

There is one habit growing with fatal rapidity in the United States, which demands the criticism of the physiologist, and that is *medicine-taking.* The country is flooded with patent medicines, and every village store has shelves appropriated to the display of this kind of *semi-apothecary* merchandise. If they would remain shelved no injury could ensue from their preparation; but, unfortunately, there is a ready market for them, as is evinced by the rapid accumulation of wealth by those who manufacture them. The origin of each one of these medicines is something like this: Mr. Unfortunate has a wife or other relative sick with consumption; he tries every thing and everybody with little or no success; finally he resorts to something which his own fertile brain suggests, and, astonishing to say, the invalid actually recovers. The surprised discoverer at once thinks he has found an infallible remedy for consumption, and the bottle-maker and the printer at once receive stupendous jobs—the former to make some quart bottles with a jaw-breaking name blown in one or all sides, the latter to get up labels and flaming posters. He is received at once by credulous invalids as a great benefactor, and by the old-school doctors and "knowing ones," as a huge humbug. But, reader, he is neither of these two—only a *mistaken man.* He does not understand the law of temperaments. Many physicians do not. I might say further: the majority of the medical profession do not.

Notwithstanding the adage "what is cure for one is poison for another," has become trite from daily repetition, its true import is not comprehended. It should be understood, that every variety of temperament denotes as many varieties of human beings, the same as the leaves and bark of trees indicate different varieties of trees. For this reason a medical man or a discoverer of patent medicine should not give to a black-haired, brown-complexioned man the same medicine which has cured a light-haired and fair-complexioned individual, even if his disease is the same.

It is plain that patent medicines must act upon the principle of "kill or cure." They are absolutely dangerous, and the amount of mischief they are doing is incalculable. Many an invalid is rendered hopelessly incurable by experimenting with these nostrums before consulting a skillful physician. I have frequently been called upon by poor emaciated creatures who have swallowed forty or fifty bottles of different panaceas. If their cases are at all curable, a great deal has to be *undone* before any relief can be administered. If people would exercise half as much discrimination in dosing as they do in many other things of less importance, patent medicines would be robbed of half their power to harm. They understand why Parson A's coat will not fit Capt. B's back—why the pretty dark dress of blue-eyed Mary does not become "black-eyed Susan," and why a hymn in long metre does not sound well to a tune of short metre, but it does not occur to them that the rule of adaptation extends equally to medicine. Let it be understood, then, that difference in form, size, and complexion, indicates difference in temperament, and that difference in temperament indicates difference in constitutional peculiarity. Next we arrive at the irresistible inference that what is beneficial to a man of a nervous temperament may be injurious to one of a bilious temperament, etc. The intelligent farmer understands the temperaments of soils, and throws on such manure as they require. On soil deficient of alkali he strews ashes of lime; on that deficient of ammonia, the gleanings of the stable, etc. A majority of intelligent physicians do not understand the *laws of temperament*, and such not unfrequently have to bear the name of "kill or cure doctors," and such they manifestly are.

In medicating, however, not only temperaments, but *complications* must be considered. The organ has many stops, as they are called by the musician, and one drawn out, or another pressed in, modifies

or changes the whole tone of the instrument. By changing the position of these numerous stops, all sorts of variations in tone may be produced. Now the human system is likewise full of its little stops. Every organ of the body has its stops, and all these must be considered by the intelligent physician before he administers medicine, and the medicine must be prepared to suit the complications. If it is not, it will, while benefiting one difficulty, aggravate another, and the unlucky invalid finds relief in one organ, or one organ stop, at the expense of one, or may be all, of the rest. It is for the purpose of thoroughly understanding any case presented by letter, that the "Questions to Invalids" presented in another place in this book, are so impertinently inquisitive.

It will be seen by the preceding that while those who buy and take patent medicines are often ingloriously humbugged, the manufacturers are by no means in all instances humbugs. Many honest men and women think they are doing a great amount of good in the world by compounding and selling "one-cure-alls." Their error lies in the head, and not in the heart.

Patent-medicine eaters and drinkers should, therefore, be careful what they put down, and take nothing in the form of medicine unless necessary. It is said that there is a tombstone in one of the English cemeteries, on which are inscribed the following words:— "I was well, took medicine to feel better, and here am I." There are thousands of tombstones in America which might truthfully bear this same inscription.

Arsenic-eating is a habit to which many ladies are addicted for the improvement of their complexions, and the obliteration of the marks of age. So long as our fashionable women are ashamed of old age, and insist on being considered thirty when in fact they are on the shady side of fifty, such desperate remedies for the marks of time will be resorted to by many. Young girls, too, who are willing to sacrifice life itself to look pretty, and especially those who admire "languishing beauties," will continue to eat arsenic, or any other powerful drug, if by the means the complexion may be improved. Until common sense, and the laws of health and life are taught in the family and common schools, it is almost useless for the physician to "croak," as his voice of warning is often called.

Turning night into day is an injurious and prevalent custom, par-

ticularly in fashionable life. Observation and experience have taught almost every one of adult age, that the habit is destructive to the nervous system, but these teachers often fail to improve any one in the absence of testimony founded on philosophy. I have looked in vain in the writings of medical men and physiologists for any rational reason why man should lie down at night and rise with the sun. The *effects* of the non-observance of this hygienic rule are plainly exhibited by many popular medical authors, but frequently not so forcibly in their literary productions on the subject as in their own faces, which betray the secret that the physiological teacher does not always practise what he preaches.

Such is the happy predominance of the social faculties in the best classes of human beings, the social circle is more attractive than the embrace of Morpheus, and most persons are ready to attribute the injurious physical effects of unseasonable hours for rest, to any other cause than the true one. There is, therefore, great need of new light on this subject—something which will appeal to the *reason* of men, and demonstrate the fact that one hour of sleep at night is worth more than three after the sun has risen. From the investigations I have made, I have come to the conclusion *that during the day the magnetic or electric currents from the sun predominate, and descending perpendicularly or obliquely the upright body is brought in harmony with the descending currents; while at night the magnetic or electric currents of the earth predominate, and flow from north to south horizontally, in consequence of which the human body should be in a recumbent position, with head to the north, in order to preserve the harmonious circulation of the nervo-electric fluids.* That this hypothesis will be favorably received by those who have had much experience as electrical therapeutists, I am confident; for all who understand the proper application of electricity, know that, with few exceptions, the electrical currents from the machine must be passed from the positive to the negative in the directions which the nerves ramify. This being the case, ought not the electrical currents from the sun during the day, and those of the earth from north to south during the night, be made to observe the same rule by a conformity of the position of the body to them? In applying the galvanic battery, if the electrical currents are passed contrary to the nervous ramifications, or from their termini to their source—the brain—nervous irritation ensues, and the patient is rendered more

nervous. Such it seems to me, must also be the result of a non-conformity to the directions of the currents of the earth and sun. In fact, we see it exhibited in a majority of those who turn night into day. True, there are a few whose strong nervous organizations appear to resist all such influences, but the continual dropping of water wears away a stone, and these exceptions finally favor the truth of this philosophy.

The sun exerts a powerful magnetic influence on the earth, arousing all animal life to activity, from the merest insect to the noblest work of God. The fowls of the air, the beasts of the field, and all human beings who obey the laws of nature, feel inspired with new life when the golden rays of the rising sun radiate from the east. The activity of the animal fluids increases till he reaches his meridian, and then gradually decreases until he sinks to rest in the west. When "old Sol" retires, the colder magnetic currents of the earth prevail with greater power; animal life becomes more sluggish; the wearied body seeks repose; and the most perfect repose is obtained by reclining in a position consonant with the earth's currents.

Fast eating, a universal habit with Anglo-Americans, is highly injurious to the nervous and vascular systems, and induces those conditions in the stomach which usually ultimate in dyspepsia. It is eminently characteristic of the Yankee to do every thing in a hurry. Not satisfied with praying fast, walking fast, working fast, and travelling fast, he generally, and that, too, unconsciously, eats fast. His jaws keep time with the locomotive's wheels, and his arms and elbows with the rapid alternate movements of the piston rods. I was once much amused with an illustration an Italian gave of a Yankee at a steamboat table. Just previous to the sounding of the dinner gong, he was descanting most wittily in broken English on the customs of the Americans, and, when dinner was announced, he proposed to show how a Yankee enjoyed (?) a good meal. With true Yankee impetuosity he rushed to his seat at the table; knives and forks flew in every direction; one arm shot to the right for one thing, and the other to the left for another; while the fork was performing a rapid trip to the mouth, the knife, which had just discharged its load, was nervously returning to the plate. A few such spasmodic motions, and impulsive calls to the waiters, ended the repast, and with a whirl of his chair, he turned almost breathless

from the table. Nor was his delineation overwrought. I have myself seen just such spectacles hundreds of times at public tables.

At home, at his own table, the Anglo-American is not much more moderate in eating. The mouth is crowded with food, and successively washed down with tea, coffee, or some other liquid. Now it is the duty of the physiological writer to admonish the reader of the effects of this habit, and if, after knowing the consequences, it is still persisted in, no one will be in fault but the sufferer, if the worst form of dyspepsia is the result.

Fig. 49.

THE SALIVARY GLANDS.

1, Parotid gland; 2, its ducts; 3, Submaxillary gland; 4, its ducts; 5, Sublingual gland.

The thorough lubrication of the food with saliva is necessary to promote good digestion. Saliva is an alkali, and electrically speaking, a negative, while the gastric fluid in the stomach is an acid and a positive. When, therefore, food descends into the stomach, only half masticated, and lubricated with some other fluid than saliva, digestion for some time is almost suspended, because the negative fluid is wanting to attract the immediate action of the positive fluid, and the presence of other liquids tends to dilute and destroy the power of the latter. In addition to this, the labor of the jaws and

teeth is thrown upon the disabled stomach. How surely, then, must the electrical or nervous machinery of the digestive apparatus be disturbed. Then, again, food in the stomach, unless at once acted upon by the gastric fluid, commences a process of decomposition and fermentation, by which means the blood also becomes involved in the pernicious results which follow. If a person eats slowly, masticates thoroughly, and omits all drinks, nature furnishes *three or four ounces of salival fluid* with which to moisten his food, preparatory to its entrance into the stomach. No one requires liquids to drink at the table. This habit is the result of fast eating. The salivary glands cannot furnish lubricating fluids fast enough for the rapid eater, so he depends on artificial liquids, which dilute what little saliva is used as well as the gastric juices. Liquids should never be swallowed till after eating, and then not to the extent that they are usually. Eat slowly, and depend only on the fluid nature furnishes to moisten your food.

Still another habit—not, however, peculiar to our fast-living Americans—is that of stuffing the stomach with hearty food on various holiday occasions, when the system does not at all require it. A grand reception is to be given to a live prince, a president, a diplomat, a governor, a general, a congressman, or to one of our ever overfed aldermen. A "big dinner" is gotten up, regardless of expense, and at about twelve o'clock, midnight, all sorts of game, turtle soup, turkey, roast beef, roast pig, lobster salad, and a thousand other things dignified with French names, and well wet down with champagne, etc., etc., are served to a crowd of red-faced gentlemen, whose vascular fluids are already engorged with red corpuscles and with inflammatory properties by over-eating, done on many a previous occasion. And these big dinners are carried home to the bedchamber to fill the mangers of night-*mares*, and feast the hobgoblins of the night which perch upon the bed-posts, and make the sleeper jump from his disturbed rest whenever the sensitive nerves of the brain are pressed and fired by the inflammatory blood. It is surprising that this gluttony—this making a sewer of the mouth and the œsophagus—this midnight bedaubing of besotted lips, has not made mankind ashamed of the mouth and digestive apparatus, as masturbation and sexual pollution have made them ashamed of the sexual organs, which were created by God mainly for reproduction,

as eating was instituted chiefly for the purpose of supporting life. I have read of a people, somewhere, who are ashamed to eat in public; every one seeks solitude while partaking of food; and it may be a debauched ancestry led to this peculiar custom.

On thanksgiving day, Christmas, and various other holidays, families get together and abuse their stomachs. Nearly everybody, at such times, eats too much, and does it wilfully; and some eat and drink things on such occasions that are so hurtful to them, that they do not think of touching them at any other time. Now, why eat any more on these days than on any other? Associate together if you choose — have a good dinner—have some dishes you cannot afford to have every day—let your table literally groan under the load of good things; but why so completely shift the burden as to groan yourselves? Let the table continue to bear the burden, while you bear away from it no more than you can comfortably carry.

Fig. 50.

THESE ARE FIT FOR A FEAST.

As to public dinners, and all meals prepared simply for entertainment, why would it not be better to cover the tables with light, delicious food? How beautifully they would look on such occasions, provided with rustic arbors, entwined by artificial vines, and loaded with *real* grapes; with baskets of apples here, and oranges there, interpersed with bouquets of natural flowers, filling the room with their delicious fragrance; gotten up, in brief, with a material and taste one meets with at a horticultural fair? How do you suppose the atmosphere of such a feast would seem to a well-fed man, compared with that which is loaded with the fumes of onions, and the odor of scorched animal fats? And, if people are not hungry, but eat simply to be sociable, why not nibble grapes, apples, and other wholesome fruits which are light, and easy to digest, whilst toasting and chatting, instead of cramming the stomach at midnight with

food only suitable at seasonable hours for that of a man who follows the plough, or bends over the anvil? The prevalent practices of banqueting, not only injure the stomach, induce disease, and abbreviate life, but they make wise men talk silly. This nation had a President who filled every office of honor, from that of a mayor of a small city, to the highest place in the gift of the people; but banquets and feasts made this great man talk like the *habitué* of a common oyster-cellar! A man of distinction certainly requires a peculiarly organized brain, an enormous stomach, and a discreet tongue, to accept and *endure* proffered honors.

Would it not be better—incomparably better—to never partake of solid, hearty food to a greater extent than is necessary to support life and health, and on all public and festive occasions, when it is proposed to have a "feast of reason and flow of soul," to cover the tables with fruits rather than cooked animals? The demands of the social circle are very different from those of hunger.

"Habit is second nature." So says the proverbialist. How important then it is that we should form such habits as will tend to develop physical health and mental vigor, instead of physical decay and mental imbecility. Habit is not acquired in a day—seldom in a year. It creeps upon an individual gradually, and if its effects are disastrous to health and longevity, so imperceptible are the changes it produces in the system from day to day, the victim is seldom aware of the cause of a disease which is developed by it.

Experiment has demonstrated that a man may endure, without pain, the heat of an oven hot enough for baking purposes, if he be placed there while the oven is cool, and the heat is slowly raised to the baking point. But does any one believe that a person kept in such a temperature, however comfortable it may become to him, will live as long as if he were surrounded with a temperate atmospheric element? Dr. Kane, and his gallant band of Arctic navigators, became so habituated to a cold temperature, that they could walk themselves into a comfortable perspiration with the thermometer at *forty-two* degrees below zero, or *seventy-four degrees below the freezing point!* But their enterprising adventure made sad inroads upon their physical organizations, and the brave commander of the American Polar Expedition, with several of his heroic companions, have since paid the forfeit with their lives. Thus we see the flexibility of

the human body to conform to whatever conditions we force upon it, and we also perceive how fatal to longevity are all deviations from the injunctions of *first* nature. We may change our natural habits of eating, drinking, sleeping, etc., to some others acquired, as easily as we can accustom our systems to extreme temperatures, and experience no immediate discomfort; but first nature will some time demand a settlement, and second nature will turn bankrupt, throwing the loss upon his superior.

Those who strive to save the souls of men counsel all to take a daily retrospect of their conduct, to see if they have violated any moral law. I would also advise a daily retrospect to ascertain if any physical law has been disregarded; for how can the immortal spirit maintain purity and complacency in a corrupt tabernacle? It is also the duty of the Christian mother to watch over the physical as well as moral tendencies of her children, and to train them into habits which will conduce to a healthy corporeal and mental development.

Sexual Starvation.

Some of my readers who have given little or no attention to the subject of animal magnetism, personal magnetism, individual electricity, etc., as it is variously denominated, will be startled at the above heading, in the chapter giving some of the principal causes of blood and nervous derangements. Especially, will coarsely made, blustering men, who never deny themselves any indulgence of appetite or passion, and frigid, unsympathetic women, who could live in the Arctic seas on an isolated cake of floating ice, turn up their noses at this new bubble of sickly sentimentality. There are two classes, however, of both sexes, who will instinctively comprehend the subject under consideration before reading any thing more than the caption. One is composed of girls and boys, and women and men, who possess fine sympathetic organizations, easily affected by atmospheric changes, or by social or domestic discord, and whose condition in life has been such as to cause them to live more or less

Fig. 51.

THE ISOLATED GIRL.

isolated from those of their opposite sex. The other embraces warm-blooded, affectionate, impulsive people of both sexes, who have been compelled by various circumstances to live in sexual isolation. Both of these classes will understand me, and say AMEN, when I place sexual starvation among the principal causes of derangements of the nervous and vascular systems.

There is, throughout all nature, a male and female element, between which there is an irresistible attraction. The observer at once recognizes it so soon as he leaves the mineral kingdom, and the higher he ascends in the vegetable and animal world, the more prominently sexual distinction and attraction present themselves. In the vegetable kingdom, and among the lower orders of animal life, sexual attraction and magnetic interchange find expression only in physical contact for reproduction. Among the higher types of animal life, before reaching the human being, they find expression chiefly in sexual contact, in performing the function of reproduction, but to a moderate degree in physical contact in unimpassioned association. When we ascend to the family of mankind, we find specimens of low spiritual and mental development, but one remove from the brute creation, who are governed by the instincts of the latter. Above them, we meet men and women with considerable mental and spiritual development, but with a preponderance of the animal organization and impulse, whose sexual attraction leads to considerable interchange, socially, but more to the impetuous interchange which characterizes sexual contact. Looking still higher in the family whose members were created in God's image, we find individuals of greater moral, mental, and physical perfection, in whom spirituality and mentality predominate over the animal instinct, and among whom sexual attraction leads chiefly to magnetic interchange by social proximity, while direct sexual contact occurs only incidentally and occasionally, and is in no instance premeditated. In other words, the reservoirs of sexual magnetism in these people are located in the superior brain at the head of the spinal column, among the intellectual and affectional faculties, from which the element radiates diffusively, and envelops the object of attraction, and occasionally extends to, and ignites the magnetic combustible elements below ; and not in the inferior brain, seated between the hips, near the extremity of the spinal column, from which, when so located, the element radiates more intensely, but seldom so diffusively, as to light the

fires of the affectional nature above. It should be understood in this connection, that the plexus of nerves located near the extremity of the spine is sometimes known by the name of the inferior brain.

Looking neither higher nor lower in the mass of humanity, we find a few who possess apparently no susceptibility to the influence of sexual magnetism. If absolutely none, they are not a whit more celestial than their more susceptible neighbors, and are invariably found, on examination, to be diseased specimens, and not a distinct type having healthy physical organizations.

If now, reader, you are prepared to dismiss all question as to sexual attraction being *natural*, and to admit that interchange of sexual magnetism is instinctively demanded, you are also prepared for the logical conclusion that sexual association is beneficial, and sexual isolation injurious, for nature's laws are imperious.

There are two essentials to the immediate support of animal life which are known to all, viz.: air and food. Without the first an individual must perish in a few moments; without the latter, in a limited number of hours. There are four essentials to physical and spiritual health which are too seldom recognized, viz.; vital electrical air; food possessing not one, nor two, nor three, of the elements of nutrition, but all the heat-producing and blood-making properties of true aliment; sunlight; *sexual magnetism.* Especially are the two latter more instinctively and impulsively than intelligently sought after, and a house-builder strains his inventive genius to shut us out from the sunlight, while the conservative tinker of our social institutions labors to isolate the sexes, suppress sexual attraction, and ignore the existence of sexual magnetism.

Do some readers inquire why the nervous system requires sexual magnetism to preserve it in health? If so, and you will enter into the mysterious science of life sufficiently to tell me why the nervous system requires sunlight, I will undertake to answer the question propounded. I have no doubt that plausible reasons could be given for both of these necessities with a little reflection, but it is not necessary for the purposes of this essay to enter upon any long-winded theory to account for them. Enough is contained in this essay to lead irresistibly to the conclusion, that the sexes cannot maintain perfect health in isolation. Where the isolation is only partially maintained, as in Shaker communities, the effects of sexual starvation are indicated. As a body, they look physically dried up. The health of the

women, who the more rigidly and conscientiously carry out the principles of Ann Lee, is, according to the testimony of a seceder, not up to the standard of women outside of their communities; insanity is common among them; and yet among these people, under certain restrictions, the sexes have times of meeting. In nunneries we meet with the most marked cases of sexual starvation. Nuns are seldom if ever vigorous looking. Even if they are apparently healthy, there is a paleness about them which indicates a deficiency of that magnetic vitality and red corpuscle which give the true indications of health. They may protest that they are healthy, but their countenances tell a different story, especially to the practised eye of a medical man. Only lately, I was called upon by a well-dressed, intelligent-looking woman, having in charge a delicate, bloodless, cadaverous appearing young woman, of about twenty years of age. On examining her case, I found no indications of organic disease. She seemed to be simply bloodless, and completely wanting in electrical or magnetic vitality. I instinctively diagnosed her case as one of sexual starvation, and, turning to the elderly lady, remarked that I should suppose this young woman had been carefully restricted to the society of her own sex. What visible effect this announcement had upon the young invalid, I know not, as I was addressing and looking directly at the one who accompanied her, and who appeared for a moment surprised and confused, but finally sufficiently recovered her self-possession to remark that her niece had been till very lately for several years in a convent! Now this young woman had on nothing of the dress peculiar to a nun, and I had not even suspected the aunt and niece of being Catholic in their religious proclivities. I simply diagnosed the case according to its physical aspects, with no word, hint, or suspicion to aid me in forming an opinion. But observation had taught me that such physical prostration is often produced by sexual starvation, and I was convinced it was the cause in this instance, without mistrusting the verdict would receive instant confirmation. My advice was—"Take no medicine—let doctors alone. Go at once into the society of both sexes, encourage the attentions of honorable men, and by social contact draw out of them all the masculine magnetism you can."

The case cited is not the only one I have examined, coming from convents, giving indications of sexual starvation. I have had also from young ladies' seminaries similar cases. Institutions for young

ladies where the exclusion of gentlemen's society is too rigidly enforced, are quite as bad for the pupils as convents. Large factories and cotton mills where females are almost exclusively employed, generally contain hundreds of pale, emaciated women who are slowly dying of sexual starvation, their physical exhaustion being aggravated, of course, by the sedentary character of their labor.

The Christian world is full of women contemptuously called "old maids" who are drying up, and daily growing more fretful and nervous in consequence of sexual isolation; for men, as a rule, cruelly avoid women of a certain age, when Mrs. Grundy brands them with the common distinguishing epithet by which they are known. It is one of the great evils of the marriage institution that a woman may not remain single, enjoying the social consideration of the married, and the social attentions of men, especially when marriage is such a "leap in the dark," and often proves so disastrous to the happiness of her sex.

Large cities and villages have swarms of women, young and old, belonging to what are denominated the "working classes," a large number of whom are excluded from good society while possessing native refinement, which renders it impossible for them to associate with uncouth and often unprincipled men, who ever stand ready to extend the hand of pretended sympathy and affection to females in their position. Men morally and mentally suited to the best of this class of women, have so many better advantages in a business way to rise above indigency and humble social position than their female equals, there are never enough of the former in the social circle of the latter to keep up any thing like an equilibrium between the male and female magnetic elements, and woman of course is the sufferer.

Wealth, however, does not always place woman in a position to receive a healthful supply of masculine magnetism. The pride of aristocracy often steps in between the young women of wealth and those young men of little money, but much virtue, who would gladly associate with them; while the young men pecuniarily able to move in the social sphere of the former, are, in a great majority of instances, attracted to association with those with whom their money will purchase the most unlimited privileges. As a rule, having quite too few exceptions, young men of wealth are given to habits of dissipation and licentiousness which disqualify them for association with the respectable daughters of affluent parents, and consequently, if the

latter have the pride of caste common to people of this class, their daughters are deprived of the society of men, and, with all their advantage of position and material comfort, must suffer from sexual starvation.

Occasionally, we hear of men effecting great cures by the "laying on of hands," and the response is often playfully made, "Pshaw! He only cures women!" While this is not strictly true, and while the male magnopath sometimes effects cures by imparting his healthy magnetism to a debilitated person of his own sex, it is nevertheless a fact that a majority of his cures are effected in cases of women; the simple reason for which is, that the want of masculine magnetism led to the nervous derangements, which, in turn, produced the diseases

Fig. 52.

SOCIAL MAGNETISM.

from which they seek relief. In any given case we may not always find the invalid to be a single woman. She may be the wife of a sickly man, who generates scarcely enough magnetism to keep his own vital machinery in motion, and if he give off any, it is of an unvitalized quality; she may be the wife of a husband who is magnetically repulsive to her; the husband and wife may be so much alike in temperament, that the forces each generates have, by years of contact, become similar in character or quality. In any such case, if the wife goes to the magnopath, and he manipulates with his magnetic hand some part of her body which has become the seat of disease, she receives benefit and possibly experiences an entire cure. She receives what her system required, for the time being at least, and she revives. Women often cure male invalids by the "laying on of hands," "magnetic manipulation," etc. I recently saw a letter from one conservative gentleman to his equally conservative brother, in which, after telling how much he had suffered from nervous prostration, he said: "I have experienced marked relief from Mrs. ——'s rubbings, which put the animal magnetism into me, and they are more powerful and reviving than any electrical battery. You," he continued, "may laugh at this, but I as one who has suffered so much, and received such *decided relief*, and in so short a time, could not doubt her wonderful power." This letter was shown to me with quite an expression of surprise by the party to whom it was written, but its contents to me were not at all surprising, for the philosophy of the whole thing was entirely familiar to my mind, for I had been cognizant of many cures of male invalids by the hands of female magnopaths.

Cases of disease produced by sexual starvation are not so common with the masculine as with the feminine sex. "Men are privileged." Why, the God of nature cannot tell, but undoubtedly Mrs. Grundy can. Men only are allowed to make advances—they do all the courting—often shabbily—but they do it all; they even allure young and thoughtless girls into trouble; get drunk; swear; chew tobacco, etc., without greatly affecting their personal or family respectability. They may become the fathers of illegitimate children, with the applause of the vulgar, the harmless jests of their associates, and the mild censure of staid people; while the mothers of illegitimate children are turned out of good society, and frequently from their mother's door, without shelter for themselves, or the innocent victim

of their thoughtlessness. With all their privileges and opportunities, however, I have met with some men, old as well as young, of conscientious or bashful traits of character, or without social opportunities, who were really suffering from physical derangements caused by sexual starvation. There are those who think they should bestow no attention upon a young woman unless with the intention of marriage, and their moral nature revolts at association with disreputable women. There are conscientious young men in large villages and cities, who, not having opportunity for introduction into good society, live as isolated from women as hermits, having no other society than that of men with whom they are employed. Many of these, however, are finally conquered by their instinctive longing for the society and magnetism of the opposite sex, and, denied the society of the good and respectable, they lay their conscientious scruples a sacrifice at the feet of harlots.

In speaking of the social life of young men, the New York *Tribune* made some comments which may appropriately find place here :— "By the census of 1860," it remarks, "our male population between the ages of fifteen and thirty, amounted to 111,091. Estimating its increase during, and since the war, there are now among us at least 150,000 young men—an active portion of the laborious, exciting life of this great, unmindful city. Two-thirds are without resident friends or kindred, striving to conquer a foothold—and how hard the contest! What daily widening gaps between those who have succeeded, and those just entering the field! Neither the religion, nor the social enjoyment of our prosperous men seems broad enough to include their employees. Look at the growth of aristocracy and exclusiveness; the world of folly, luxury, and fashion; the enormous cost of subsistence; the meagre salaries in vogue, and see what chance of comfort or sympathetic ease the town has to proffer her 150,000 clerks, apprentices, and students. Herded together in the beds and attics of boarding-houses, shut out from the happy homes established by long residence and success, they are almost driven to the public saloons for light and warmth, and for that *friendly companionship*" (and I will add magnetism), "which either for good or evil, youth instinctively craves and will obtain.

"The employers are surrounded with all the appurtenances which make virtue attractive, and easy to pursue. The employees are not only urged into vice by their discomforts, but it is vice alone who

tenders them an alluring hospitality. She sets forth her 7,786 convenient bar-rooms, her 653 billiard-tables, her 100 gambling hells, her 235 concert saloons, and her 730 registered houses of prostitution — in all of which, every young man will meet a merry welcome."

Young men crowd the beer saloons where "pretty waiter girls" are employed, and really simply for magnetic association with women. Lager, wine, or some other beverage is called for, and often drank reluctantly, for they wish it to appear that the drink is what they are after, at least to those who observe them descending or ascending the steps of the saloon. Sometimes the contents of the glasses are left undisturbed. Many of these young men enter with no libidinous intentions. They feel thirsty or hungry for *something*, they hardly know what; it is not whiskey—it is not beer—it is not tobacco—all these they may purchase at almost any corner, and the tobacco may be chewed or smoked in the streets. No, nothing will satisfy the physical and soul yearnings but the magnetism of women. They may not have thought of this element—they may never have asked themselves, or anybody else, what animal and sexual magnetism is; they may never have thought of any such thing; but here they get what they hanker for without asking the name or quality of the article.

People of both sexes generally recognize the *fact* of sexual attraction; few have given the least attention to the subtle element which constitutes it. This element, if investigated, is found not only to be a nutrient, but a stimulant more potent than alcohol, and naturally possessing none of the injurious properties of the latter. It gives vigor, and, in reality, it imparts erectile power to all the tissues of the body, and aids in producing and preserving plumpness of form. It stimulates ambition, imparts elasticity to the muscles, and brilliancy to the eye, of those who are favored with its influence. Both sexes have an appetite for it, and frequently without knowing it. They long for something, they know not what, and seek to appease an indefinable desire by resorting to narcotics, stimulants, and nervines. Herein, drunkenness has an incentive, which has perhaps never before been thought of; but it is a fact that, with the imperfect social arrangements which characterize our so-called civilization, and which attempt to regulate the social intercourse of the sexes, men and women go up and down the earth famishing for something,

they cannot, or will not, tell you what—unhappy, unsatisfied, hungry, starving—in some cases stark mad—and finally, in their blind search for what their systems crave, take to liquor, tobacco, or opium.

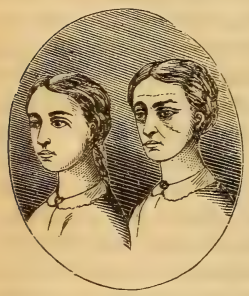
There are, in fact, to cover the whole ground, two kinds of invisible sustenance, for which nearly all men and women are starving, viz.: *the spirit of good*, and *sexual magnetism*. One nourishes the moral nature, and by its elevating effects upon the corporeal system, imparts physical health. The other nourishes the physical structure, and by its exhilarating effect upon the nervous system, makes the spiritual nature buoyant and receptive. Both may be made attainable. To invoke, and receive the spirit of good, one has only to sincerely and heartily resolve to make moral improvement the chief aim and most important work of his life, and he finds at once a steady influx of the elevating influence. To obtain sexual magnetism, nothing is necessary but association of the sexes, and Society and State should institute such regulations as will not unnecessarily restrict this. Many suggestions bearing directly or indirectly on this subject will be found in Part Third. But I will here present one way in which sexual starvation might to some extent be remedied, without weakening, but rather strengthening, the props of our social system. I would advise the establishment in every community, large or small, *at public expense*, reading and conversation rooms, numerously in cities, where the sexes may socially intermingle, whether acquainted or not. They should be under the supervision of a certain number of eminently respectable ladies and gentlemen, appointed as trustees, whose duty it should be to enforce order and decorum, and to exclude only persons of dangerous character. Such rules and regulations could be easily devised and enforced as would effectually prevent those who would contaminate the moral atmosphere of the place from being admitted; but with these precautions not too strictly instituted, all who are allowed to enter should be admitted without fee, and allowed free social intercourse, without the formality of introduction, unless a committee, with badges to designate it, be organized for the purpose of conducting personal introductions, a practice already in vogue to some extent at balls and sociables. These reading and conversation rooms should be well supplied with books and papers of interest, and open alike to rich and poor of both sexes, and all conventional reserve should be thrown off while at these places, even if put on again when outside

of them. Would not such places of resort be full of entertainment for women, and also full of attraction for men? Would they not, if properly managed, successfully compete with the drinking saloons, gambling hells, and houses of prostitution, in arresting the interest, and securing the presence of young men who are now the patrons of demoralizing attractions? If we create free public schools for the education of our children, may we not with equal benefit to the community, create institutions which shall encourage moral, intellectual, and physical development of men and women? At what fixed age should the State abandon the intellectual and physical culture of its people?

Prostitution.

It is sickening to reflect that in Christian countries there exists, to an extent even greater than in the vast domain where the Christian religion is not taught, a class of women who, for a sum of money varying from 25 cents to $100, will put themselves in sexual contact with men for whom they entertain no sentiment of love, no sense of physical attraction, and toward whom they, in many cases, feel an aversion if not disgust. It is also humiliating to all who are working for, and have faith in, the ultimate moral and physical regeneration of the human race, that the amative passions of men can be so morbid as to lead them for one moment to value an indulgence of this nature which can be purchased like a paper of tobacco or a glass of rum; but look whichever way we will, we are confronted by a masculine element wherein the sentiment of love is so perverted that there is a perpetual demand for demoralizing indulgence; and a female element wherein perverted love, pride of dress, and destitution, stand ready to supply it. Hence, sexual gratification becomes an article of commerce, purchased by the male and sold by the female, greatly to the moral and physical degradation of both. The first effect upon the female is moral debasement. Her countenance may have exhibited all the marks of trouble, disappointment, and want; but now she

Fig. 53.



THE INNOCENT GIRL CHANGED BY HARDSHIP AND VICE.

has the additional mark of shame. She has lost her self-respect, and painfully suspects that she has forfeited the respect of others. When this suspicion is confirmed, she becomes bold and reckless. An expression of hardness creeps over her features, and all the artlessness and sweetness of her former face have given way to a look of disgrace, defiance, and self-abandonment. In a little while the violation of her moral nature exhibits its effects in her nervous system, and she is obliged to live under constant excitement of some kind in order to feel at all comfortable in mind or body. If the social surroundings are not sufficient to furnish this, liquors, drugs, and narcotics are excessively resorted to for this purpose. Finally, physical corruption, by venereal distemper, is inaugurated. How could this be otherwise? Suppose a person should post himself in a conspicuous corner of the street, or in some building accessible to everybody, and should propose to eat every thing that the crowd chose to give him, provided he were paid for it. Then picture to yourself any number of wanton men and boys patronizing his folly—one giving him something he possibly likes; a dozen, something he perfectly loathes, and twenty more, something he is entirely indifferent to, but which he knows he does not physically need. Let this abuse of his stomach go on day after day, and night after night, for months, and years. What person is there whose stomach, under such treatment, would not become frightfully diseased? Even voluntary excesses in eating bring on the various derangements of the stomach, known by the one common name of dyspepsia; but what sort of a malady do you suppose the person would have that I have just instanced? Heaven only knows! Well, now, it is unnecessary for me to assure any one that the procreative system of the female is just as sensitive as the stomach, and that with abuse it is even more liable to disease. With voluntary, unpaid for, excesses, various difficulties, such as leucorrhœa, prolapsus of the womb, etc., ensue; but when a female gives herself up to sexual pollution to every one who will pay her for it—often entertaining several in one day or night, for whom she cares little or nothing, or cordially dislikes, what may we more naturally look for than the vitiation of the vaginal secretions, and the generation of poison capable of inoculating the blood of both sexes, and producing local affections of a most frightful character? There is, consequently, in addition to the original stock of venereal disease, about which there is so much dispute as to its origin, a new

supply constantly being manufactured in the dens of harlotry, and of a quantity and quality not in the least inferior to any which has been imported.

With such inevitable results attending marketable promiscuity, prostitution may be compared to a vast sea of physical corruption, in whose waters the licentious lave and come out lepers. Where the beautiful river, lake, or ocean, contributes to the commercial prosperity of any city, there also this great sea of corruption rolls most unobstructedly, and thousands of peaceful villagers who daily or nightly frequent the metropolis, in an unguarded moment, become submerged in its dirty waters, and then carry home to their faithful wives a disease more loathsome than a suppurating cancer.

The blood of the whole human race is becoming contaminated with venereal poison. Do you question this? Look at the fact, that in the United States there are not less than 100,000 harlots, and in London alone nearly an equal number, nightly dealing out sexual pleasure and physical death to a still greater number of inconsiderate men. It is computed that in the ten chief cities of England, there are about 300,000 prostitutes! Cincinnati is one of the smaller cities on this side of the Atlantic, but a paper published there remarks that the amount of property, personal and real, invested in the traffic of prostitution in that city, as revealed by late police investigations, is one million of dollars, and it places the annual expenditure in this direction at one million two hundred and fifty thousand dollars.

In the city of New York, there are altogether ten or twelve thousand courtesans, and probably 100,000 is an under-estimate of all in the United States. "But they are not all diseased!" says one. Admit that; but it is safe to infer that one-third of the whole number are, and a little exercise in simple division shows to us that the seeds of venereal poison are communicated nightly to over thirty thousand persons in our country alone, many of whom have wives or bed-companions to whom they are liable to impart the disease.

Next, perhaps, offspring are infected, and they with their ulcerated little gums communicate it to the nipples of nurses, who have been called to supply the places of diseased mothers in nurseries; and they in turn impart it to other innocent babes, and so the infection spreads, like fire on the prairie, through the whole human family.

The male, however, is not simply liable to venereal affection. Nervous derangements and spermatorrhœa are almost sure to afflict him

in time, if the female simply submits to the act, and does not participate in its pleasures; and it is a well-known fact that the courtesan nearly always has her paramour, upon whom she exclusively lavishes the intensity of her passion, while all manifestations of enjoyment with her patrons are merely pretence. The physical injury which the patrons of the houses of ill-fame suffer in this respect, is more extensive than many who have given attention to the evils of prostitution dream of; but the effects of venereal poison are more indisputable and immediately apparent, and these are sufficient to occasion wide-spread alarm.

It has been argued, and with a show of plausibility, that prostitution is a *necessary evil.* That did it not exist, our wives and daughters would be unprotected from the insidious advances of libertines, and the forcible outrages of men of reckless passion. My own observation has convinced me that libertines in towns of moderate size, where prostitution is not tolerated, are more given to the seduction of thoughtless wives and unsophisticated young girls than the same class in large cities. But the Rev. Dr. Wardlaw asks, and with propriety,—"What special title have the wives and daughters of those who employ this plea to the protection of *their* virtue, more than other wives and daughters? Why are theirs to be protected at the expense of others, and not the others at the expense of theirs? Who, in the community, are to be the victims—the vice-doomed safeguards of the virtue of the rest—the wretched safety-valves of unprincipled and unbridled passions? Are we to have a decimation, by lot, of the virginity of the country?—or is some inferior class to be sacrificed to the demon of lust for the benefit of those above them? Is vice essential to the preservation of virtue? That were indeed a hard necessity. Where is the individual, male or female, and in what rank soever of society—whom I am not to dissuade from vice?—whom it would be wrong so to dissuade?—the successful dissuasion of whom would be an injury to the public?—by prevailing with whom to give up the evil course, I should incur the responsibility of one who shuts a high pressure safety-valve?—where the individual whose body and soul I am bound to leave to death and perdition, lest perchance some others should come to be exposed to temptation?"

These questions are suggestive, and cannot fail to awaken reflection on the part of those who claim that prostitution is a necessary evil. Perhaps a little inquiry into the causes of prostitution will set-

tle this difficult question. One of the primitive causes, I maintain, is the premature development of the amative passions of youth by a too stimulating diet. Most parents allow their children in swaddling clothes to indulge in a diet only suitable for adult age. Do they not know that condiments, animal food, and coffee, early arouse the slumbering sexual passions of the young? These articles of diet at once impart undue warmth to the blood, and awaken early sexual de-

Fig. 54.

WHEN SUCH REWARD IS OFFERED FOR VICE.

sires in their children, leading boys to early acquire the arts of the libertine, and rendering girls susceptible to the amorous advances of the opposite sex. Thus, from one parental error, spring up on one side a host of amative libertines, and on the other, scores of voluptuous women who have not the power to resist temptation, all of whom are required by custom to abstain from legal marriage until

they have nearly or quite passed their teens. The remedy for this evil suggests itself.

Another cause is unhappy marriage. This creates thousands of bad men and bad women. The indissolubility of the marriage contract drives both parties to desperation; makes the husband a willing patron of the harlot, and the wife an easy victim to the libertine. Ignorant of the laws that should govern marriage, men and women are

Fig. 55.

AND WANT AND THREATENED STARVATION HELD OUT TO VIRTUE.

daily rushing into matrimony whose physical, mental, and magnetic uncongenialities are only discovered to them after the "honey-moon" has cooled down their impulses, and left their reasoning faculties unobscured by the infatuation of passion. When they awaken from their dream, they find the civil law a reality, and that they must content themselves to live in their adulterous relation one with the other

or incur public disgrace by the commission of some crime which will entitle them to a divorce. They may not in all cases aim directly at this, but they feel a kind of recklessness which leads them to decide that they cannot, under any circumstances, plunge themselves into a worse condition. Some suggestions for removing this evil will be given in Part IV.

Another fruitful cause of prostitution in large cities is the small compensation awarded to female labor. In consequence of this, few are able to earn more than enough to supply present necessities; and when "hard times" prevail, they have neither work nor other resources for subsistence. In such extremities, a few, whose pure souls abhor a life of shame, choose death rather than the princely abode of the courtesan, and end their existence by poisoning or drowning. Many rush into harlotry, for observation has taught them the humiliating fact that men will pay dollars for sexual gratification, who will bestow only pennies in charity. It is estimated that six and one-half millions of dollars are annually paid in this city alone to "pretty waiter girls" and courtesans! When such reward is offered for vice, and want and threatened starvation held out to virtue, it is only surprising that more do not abandon the flickering night-lamp and needle for the dazzling chandelier and the easy-cushioned *tête-à-tête* of the fashionable brothel.

The "hard times" of 1837, '54, '57, and '61, drove hundreds of New York seamstresses and shop girls to a life of prostitution. The streets of this metropolis throng with this class of females whenever there is a financial pressure, local or general. Some 30,000 women are dependent upon the products of their needle in New York, many of whom have helpless parents and children who look to them for subsistence. Imagine their terrible extremity when thrown out of employment. During the great rebellion, the wives of indigent soldiers, both North and South, were in numerous instances reduced to the necessity of choosing between starvation and prostitution.

It is said that out of 5,000 prostitutes in Paris, whose cases have been minutely examined, 1,400 were reduced to that state by sheer destitution! A writer remarks that "there are fifty or sixty families in Edinburgh, who are almost wholly supported by the secret prostitution of the mother, and three times that number who are partially maintained in the same manner. A daughter had struggled

on six years to support herself and bed-ridden mother by the needle; before sacrificing her virtue she sold the last blanket from her mother's bed, and her own last dress.

"Who will deny that these are startling considerations. And what is true of European cities, is true of American ones, to a greater or less degree. Young girls can always get money in our large cities by bartering their virtue. It is an unfailing *dernier resort.* Why should it be thought strange that a female, pressed by pale want, should do that which a male will do in the absence of this necessity, and without a scruple? And why, especially, should it excite wonder, while black-hearted seducers and procuresses, knowing this want, swarm thick around, ever ready to take advantage of their distressed condition?"

For this evil it is difficult to suggest an immediate remedy, such is the spirit of rivalry, speculation, and selfishness, in the commercial world; but there is one which time and change in public opinion may introduce. It is to educate girls as we do boys in the practical business matters of life, and then open to their pursuit all the trades and professions, in order that their fields of industry may not be so unreasonably circumscribed. Our social regulations, which so greatly limit the industrial sphere of women, frequently place them in a condition of want, without shelter for their heads, or food for their stomachs. They are confronted by only two alternatives, beggary or prostitution. In pursuing the former, they meet the frowns and whining excuses of those more fortunate in life; while in the latter, money comes freely from the hands of willing patrons, who not only give them sustenance, but privily flatter their vanity.

Another cause of prostitution has its origin in the ignorance which prevails concerning the power and phenomena of animal electricity, or magnetism, as it is generally termed. All classes of females, from the daughters of the affluent to the pretty shop-girls, contribute inmates to the brothel. In consequence of ignorance in this matter, they are not aware that some men possess electrical power to charm like the snake. Nor are they sufficiently educated in regard to the strange passion existing within themselves, to know how weak, under some circumstances, they may become to resist temptation. The philosophy of this charming power will be thoroughly explained in Part Fourth, but the consequences admit at least an allusion here.

Coquettish ladies are apt to invite the attention of prepossessing

strange young gentlemen, and coquettish young ladies, I am sorry to say, are numerous. They commence flirting with their admirers with the predetermination of keeping their affections to themselves; still they will venture much to ascertain the sentiments of their pretended lovers. Sometimes they are pleased to see how they can amatively exasperate them; but gradually they become practically mesmerized, when pretty coquettes find themselves, like the fluttering bird before the charming serpent's mouth, utterly unable to control themselves. The keepers of houses of ill-fame in large cities know that many men possess this singular power to charm, though perhaps not one of them knows the mysterious agent they employ to produce this fascination. The result is, that men who are so powerfully electric or magnetic as to be able to exercise such a controlling influence over young women, are stationed in all large manufacturing towns, where female operatives are numerous, to obtain fresh victims for the fashionable dens of prostitution. A partial remedy for this evil may be given in a few words. Young ladies must not make too free with young gentlemen, whose characters are not favorably known in the neighborhood in which they reside. Observance of this rule may sometimes cause Julia to turn her back upon an angel; but as devils are more numerous in travelling pants and waistcoats, so serious a slight will seldom be given to celestial broadcloth.

Still another cause of prostitution is "sexual starvation." As the preceding essay is devoted to this subject, I will only allude to it here as a promoter of licentiousness. There is a natural appetite—an insatiable craving, if denied—of one sex for the society and magnetism of the other. If free social intercourse between men and women be provided and encouraged in some rational and elevating manner, magnetic equalization would take place in a great measure simply by social contact, and that intoxicating attraction, aggravated by isolation, which, when the sexes come together, is liable to lead to direct venery, would be forestalled. The free interchange of the sexual magnetic elements in an elevated social way, would greatly tend to prevent those earthquake and tornado outbreaks of passion, which result in rape and sexual pollution. The man who is stomach-starved will devour the flesh of his fellow-man, or even his own flesh, as illustrated in narratives of shipwrecks; and the man of strong amative passions, who is sexually starved and

isolated from the female element will, when opportunity occurs, outrage the persons of passionless little girls; or appease his heated desires in sexual contact with women reeking with disease, in the low dens of harlotry. It is utterly useless to shut one's eyes to these facts, and the only way to avert them is to try, by morally elevating means, to so equalize the magnetism of the sexes as to prevent thunder-storms of passion, such as newspapers daily chronicle from one end of Christendom to the other. A partial remedy for sexual starvation is given in the essay on this subject, and those philanthropic men and women, who hope by combined action to repress or exterminate the natural passion of amativeness in other people, while they do not expect to effect such a result in themselves individually, had better expend their ammunition in the direction I have pointed out.

In reviewing some of the principal causes of prostitution, can we not see that if it really be a necessary evil, it is so because of important errors in the training of children; unsuitable civil laws regulating marriage; despotic customs circumscribing the industrial sphere of woman; ignorance of the electrical power of every individual for good or evil; and of the social despotism which separates the sexes? Reformation in the training of children is the first place to begin to extinguish prostitution. So long as the sexual passions of children are stimulated to precocity by an exciting regimen, and goaded to illicit gratification by all sorts of fictitious and exciting literature; so long will there be men who will violate the marriage bed, and destroy virgin purity where the institution of prostitution is not tolerated; and so long will houses of ill-fame be annually furnished with voluptuous young females from all ranks of society.

Were it universally known to what an alarming extent the pernicious physical effects of prostitution are felt throughout all communities, more decided measures would be adopted under the paternal roof to cut off one of the main tributaries to this gigantic evil. The word of the mother is the law of the household, and she seldom dreams, even if suffering with disease induced by venereal poison, that prostitution can ever inflict a pang in her sheltered home. Why, I have cured hundreds of ladies from nearly every State in the Union, whose diseases arose directly or indirectly from syphilis, and who would have died of grief had I divulged to them the real nature of

their complaints. I will not venture to compute how many have been my patients for the cure of venereal disorders, or diseases arising therefrom. Fowler, in a little work on Amativeness, remarks, "Many do not know how prevalent this disease is in its various forms. Its victims keep their own secret as long as possible, and doctor themselves, except when their case becomes desperate; and then confide it only to their medical adviser, whose very profession forswears him to keep the secret. Oh! how many of our young men have ruined their constitutions, and become invalids for life, solely by means of this disease or attempts to cure it. Indeed, its prevalence at the Sandwich Islands actually threatens the extinction of that nation, which, at its present rate of mortality, it is computed to effect in about sixty years! And if it goes on to increase in the ratio of its past progression, it will ultimately cut off our race itself!

"The fact that SEVERAL THOUSAND COPIES of a little work of less than twenty pages, on the cure of venereal diseases, are sold *every month, at one dollar per copy*, and that other works of this class sell in proportion, shows conclusively that there are *several thousand new victims* every month! No patient wants more than a single work, yet TWENTY THOUSAND PER MONTH does not equal the sales of these works, and of course falls short of the number of victims, for none but venereal *patients* will pay thus dear for so small a book, of no manner of interest to those not thus afflicted. All this, besides all those who indulge with other than harlots by profession! Almost incredible, but nevertheless true!"

I have not the least doubt—and my estimate is based on authoritative "figures which cannot lie"—that *thirty thousand* males are daily infected with venereal poison in the large cities of the United States, a majority of whom are residents of inland towns, whither they return to spread the seeds of the loathsome disorder! Men of vicious habits in cities are generally too well acquainted with the different grades of courtesans to contract disease. They know who are "sound," as they express themselves. Their acquaintance with lewd women is not so limited but that they can exercise the privilege of choice. Still, the boasted smartness of these men does not always avail. When the medical seine is drawn, this class is numerously represented. In the public institutions of New York city, about 10,000 cases of venereal disease are annually treated, to say nothing of those who seek the advice of their own physicians.

The reader cannot fail to see from the foregoing that prostitution is a prolific source of blood disease, and that it is rapidly converting the great fountain of life, as originally imparted to man by his Creator, into a slough of death. Of all blood impurities, there are none which lead to such endless varieties of disease as those induced by the virus with which whoredom is inoculating the whole human race. Then, too, the nervous disorders resulting from marketable promiscuity should not be lost sight of in the summing up. On opening this essay I spoke of the depressing effect which a sense of disgrace inflicts upon a young woman who takes to her embrace a man for whom she has no affection, solely for the money he pays her. Her innate, womanly delicacy is affected from centre to circumference, and if she possesses a particle of natural religion, her moral nature is no less agitated. How, under such disturbing influences, can the nervous system maintain its normal vivacity and strength?

I have also alluded to the injury visited upon the nervous system of the patron of the harlot when no venereal affection is contracted. Unless the female is magnetically responsive to the amative delirium of her companion, the latter has simply practised the act of masturbation, and the effects upon his nervous system are no less injurious than when this outrage upon the genital organs is self-inflicted. There is, too, such a thing as *diseased magnetism*, which the courtesan may impart when she has no local difficulty with which to infect her patron. If she has repeatedly had venereal disorders, her nervous or electrical fountains, as well as her blood, have been vitiated, in consequence of which her very atmosphere is physically, as well as morally deteriorating.

In full view of the moral and physical degeneracy of the condemned courtesan, however, it is wrong and unchristian for her sex to abandon and leave her in her unhappy situation without persistent effort for her reformation. Popular opinion and action are all wrong here. Let a woman—no matter how destitute—no matter what palliating circumstances may be urged in her behalf, once become the inmate of a brothel, she is condemned to stay there until she comes to moral and physical rottenness, unless she have force of character sufficient to rise unaided from her degradation; and even then she must buffet, perhaps during the remainder of her natural life, social isolation, and the chilling contempt of her more fortunate

sisters! What wonder the poor prostitute considers herself an *abandoned* woman! Even when death rescues her soul from social and physical wretchedness, her body is denied a Christian burial! Think of it, men and women, and then call to mind the words of Christ:—"The publicans and harlots go into the kingdom of God before you."

There are thousands of women to-day whose naturally pure spirits are chafing, and their divine forms wasting in the atmosphere of prostitution, who are better educated and possess better qualities to make good wives, mothers, and thorough workers in the cause of humanity, than many daughters of affluent parents. All they need is a sympathetic, encouraging, and loving hand extended to them across the almost impassable gulf which a false society has too rigidly fixed between the condemned ground upon which they stand, and the fields of usefulness and respectability. A little moral and material assistance, extended by women, and encouraged by men, would deliver thousands of females—naturally good—circumstantially bad, from brothel hells. Shall they receive it, or will women continue to be cruel, unchristian, and unjust, to the more unfortunate of her sex, who are perishing morally, and whose gradually dying bodies are inoculating the whole human family with putrefactive disease.

There exists in our city, a society called "The Midnight Mission," which is making some effort in the way of reclaiming those who are pursuing vice as a vocation, but it is said that it receives more support from men than from women. Women seem to persistently hold back from bestowing any united effort for the reclamation of the unfortunate of their own sex. The Rev. O. H. Dutton, in a discourse delivered at Trinity Church, some time since, presented the design and plan of the organization, according to the reporter, as follows: "It is, in brief, a scheme for the rescue and redemption of the class known as 'fallen women.' To them" he said, "it appealed in a twofold manner: first, by affording a temporary refuge, and striving to obtain a permanent home for those who, of themselves, desire to abandon a reckless life; and second, by endeavoring to awaken those who seem careless to the real dangers of their position. For this purpose a place is provided where, at stated periods, meetings are held under the conduct of the men and women connected with the mission, where religious instruction, advice, sympathy, and material

assistance are given to those who need it; and on the occasion of these meetings, the male members connected with it, go forth to the haunts of those whom they wish to reach, and invite them to come in. During the day-time, also, kind and Christian women attend at the rooms and offer advice, sympathy, and assistance to such as seek it. Of course" he remarked, "when aid was sought to advance the scheme, it was met with many objections. 'It was hopeless; these women cannot be reclaimed;' 'they do not wish it;' 'it is dangerous to the morals of those who attempt it;' 'the work is too great;' 'the subject is too delicate a one to meddle with;' etc., etc. But" said he, "such objections were controverted and overthrown by irrefutable facts. Scores and hundreds of these women had a desire to reform, if only the way is open. The task of reformation is difficult, but not impossible. Not only the experience of the members of the society, but the records of similar institutions prove this." The speaker gave some statistics of the results of six years' operations of "The Midnight Mission" in London, by whose influence and aid nearly 3,000 women had been rescued from a life of crime. He spoke of the many good qualities which these women, as a class, are known to possess; showed the magnitude of the good which might be wrought; and closed with a thrilling appeal to the men and women present, to give what aid was in their power for the furtherance of so great a work.

Such associations ought to be cordially promoted by every woman, and by multiplying them they would do a vast amount of good; but when it is considered how many in London alone, maintain themselves by prostitution, and that in six years, but 3,000 have been rescued, it is readily seen how primarily essential it is to eradicate the causes which drive women to a life of degradation. The cure is important, and should not be neglected; but prevention is the main thing, and our system of society must prove itself a failure if it cannot ultimately succeed in supplying a prevention which will prove radically effectual.

Unhappy Marriage.

This contributes to destroy the tone and vigor of both the nervous and vascular fluids. The mind, chafing in the galling fetters which bind it to an uncongenial companionship, almost forgets its corporeal dependency, and consumes within itself the nervo-

electricity which should be dispensed through the nervous system, to impart healthy action to the blood and the organic machinery.

Fig. 56.

UNHAPPY MARRIAGE.

Unhappy marriages are unlike any other troubles, because society is so constituted that a majority of their victims prefer rather to fall suicides to their self-inflictions, than to encounter the frowns of their friends and acquaintances by practically severing a contract which yields little but mental disquietude, affectional suffocation, and nervous and vascular debility.

The world little knows the extent of matrimonial inharmony. Each pair who find themselves unhappily mated, imagine that they belong to the unfortunate *few* who have made the great "mistake of a life-time;" but the physician, in whom is generally confided the secrets of the broken heart, after the constitution has also become broken, knows, from the frequency of such confessions, that they form a part of the great majority instead of the minority.

An English paper several years ago stated that in the year 1854, there were in London 1,132 runaway wives; 2,348 runaway husbands; 4,175 married people legally divorced; 17,345 living in open warfare; 13,279 living in private misunderstandings; 55,340 living in mutual indifference; while only 3,175 were regarded as happy; 127 nearly happy; and 13 perfectly happy.

In what way the English statistician obtained these facts, if they are facts, I am unable to say. In this country it would be impossible to gain correct information of the amount of connubial infelicity as compared with the real happiness in the domestic relation, unless every physician of extensive practice should contribute the results of his observations. Seldom are the most gossiping neighborhoods of the United States acquainted with the actual state of feeling existing between the husbands and wives which live therein, and it is not uncommon for husbands and wives to deceive each other, with regard to their real sentiments when they find that they have mistakenly entered into a companionship distasteful, and perhaps disgusting, to one or both.

I was once called upon by a lady, in one of the New England States, whose mind was distracted and nervous system nearly exhausted, because she had formed an unhappy alliance with a man whom she found she could neither respect nor love. But she had great benevolence, and rather than make him unhappy by a disclosure of her feelings, she had concealed them from him, and they were secretly gnawing away the nervous threads that connected her spirit with her body. Ah! how many wives whose eyes fall upon this story, will see in it the mirror which reflects their own miserable situation. Rest assured, that lady is not the only one whose benevolence and pride bind her to an unnatural union, and a concealment of her wretchedness.

Unhappily, the victims to uncongenial marriages, are not alone sufferers thereby. The nervous, puny offspring, which is the issue of such adulterous alliances, opens his eyes on a world of physical and moral wretchedness, and hence the sin of the parents is visited upon their children of the first and every succeeding generation. So marked are the physical influences of unhappy marriage on the offspring, I can generally tell at once, when I see a family of children, whether the father and mother are happily or unhappily mated. Both mental and physical suffering is the inevitable inheritance of the unfortunate child who is born of ill-mated parents; and if he survives the fatal tendencies of a poor constitution till he himself becomes a father, his child, in turn, will possess at least a trace of his progenitor's infirmities, and so on through the whole line of his posterity.

For further remarks on this subject, embracing a treatise on the causes, effects, and partial remedies for unhappy marriages, the reader is referred to Part Fourth of this work, where it will receive the attention its importance demands.

Impure Vaccination.

In the seventeenth century, a country-woman astonished her surgeon by telling him that she could not have the small-pox, because she had already been affected by the cow-pox. The woman was fresh from the cow-yard and the country, and the surgeon was Dr. Edward Jenner, a physician at that time of no very great prominence. Dr. Jenner at once set himself to the work of investigating the country-woman's whim when he found that the dairy-

maids frequently contracted a disease from an eruption on the bag of the cow, which affection they denominated cow-pox. He further found that among these people, the belief was prevalent, that having had an infection from this eruption they could not have the small-pox. Physicians unanimously ridiculed it, and the clergy denounced it outright; but Jenner took it upon himself to pursue the investigation, and finally succeeded in demonstrating that what was supposed to be the milk-maid's superstition was a scientific fact.

Fig. 57.

VACCINATING THE BABY.

If Jenner had stopped here, his discovery would have been a much more valuable one than it has thus far proven to be. He continued his investigations until he also discovered that the virus taken from the arm of a person vaccinated with the cow-pox, could be successfully transferred to the arm of another person, so as to render him also proof against the approach of small-pox. This was very convenient, because sometimes the disease would disappear from the cattle for years; but I am compelled to believe that this portion of his discovery has proved an immense injury to mankind, and the evil is increasing rather than diminishing.

Hardly a mother, now a days, thinks of allowing her child to reach the age of ten years without having him vaccinated. Her inquiry is not "How may I in some way obtain the virus direct from the cow?" but is, simply, "Where can I find a doctor or some one who has some vaccine?" Perhaps a neighbor's child has a sore arm, or "scab," as it is called. If so, the inevitable needle comes into requisition, and the child is vaccinated; or perhaps the doctor is called, because the neighbors have none of the necessary virus; but in some way or other, the baby is made to have a sore arm, and the sorer the better, the unwise mother often thinks. Here and there, however, baby breaks out all over with pustules and ulcers, when the good mother awakens to the fact that the matter taken from the arm of that child over the way, or that brought to the house by the doctor, must have been scrofulous in its properties! Here is the evil. Many a fair, fat, and bouncing baby is not so healthy as its plump infancy indicates. Scrofula often imparts that

very clearness of skin so much admired in babyhood; but in adult age, if not before, this insidious impurity exhibits itself in some more disagreeable way. From some just such child the vaccine has been taken.

Some wiser mother asks her neighbor, or her doctor, as the case may be, "whether the child, from which this virus was taken, is healthy?" To which the ready response is, "Perfectly healthy—beautiful child! one of the sweetest little things you ever saw!" The parents feel almost insulted that such a question should be raised.

Not only has scrofula, but that dreaded impurity, syphilis, been conveyed to the blood of healthy people by means of vaccination. Suppose for a moment the child of a syphilitic parent be vaccinated. By the time the sore is sufficiently developed to be valuable to vaccinate another, it is as much a syphilitic ulcer as it is a cow-pox pustule. It is not necessary that syphilis should have already manifested itself in the child. His blood contains it, and a sore made by any means, attended by suppuration, would attract to it the syphilitic impurities.

When in my practice I find scrofulous or syphilitic blood which cannot otherwise be accounted for, I invariably ask: "Have you been vaccinated, and if so, was the vaccination attended with any unusual inflammation or soreness?" This question has often caused a lengthy pause and a "brown study" on the part of the patient, who finally breaks the silence with some such reply as this: "Doctor, I never had any of these difficulties before I was vaccinated, and now I remember, I had an awful arm." Well, this does not prove that they became infected by this means—not at all. But I have another class of patients, who tell me at the outset, that they were poisoned by vaccination. They know all about it; either their mothers were conscious of it at the time, and so informed them, or they were old enough when vaccinated, to remember just how they were affected, and they had unmistakably traced years of physical suffering to this one cause. Now, as for the first class mentioned, is it not plausible, at least, to ascribe their blood-impurity to impure vaccination? No one who has given the subject the least consideration, doubts that impurities may be inoculated in this manner. Every physician knows that a long and painful affection of the arm, exhibiting an extended inflammation and ulceration, are not the

true characteristics of cow-pox. There is no evidence of any scrofulous, or syphilitic, inherited impurity. In some of these cases the patient is one of a large family of children, all in excellent health except himself, while his progenitors are living at a ripe and healthy old age. Shall we not, then, ascribe the disease affecting their blood to impure vaccination, if their own habits are such as to set aside the question of their having acquired it by any other means?

Many people are exposed to this inoculation peril several times. It is said that the effects of vaccination run out in seven years. So whenever small-pox is prevalent, all who have passed over seven years without repeating the operation, abrade the cuticle and put in some more virus. This is worse than nonsense, because it is dangerous. If a person has been vaccinated once from another's arm, without contracting acrimonious humors of the blood, he should be thankful. Besides, it does not "run out" once in seven years. The best virus from a cow is a poison which changes chemically the nature of the blood. As well might you tell a scrofulous patient that his scrofula will run out in seven years without treatment; or that syphilitic poison will work itself out unaided in a specified time. If some cases of small-pox occur seven or twenty years after vaccination, it is either because it did not take well at the outset, or in consequence of the utter failure of Jenner's discovery in these exceptional cases. During the change going on in our bodies, every particle of matter is replaced by an exactly similar particle. There may be a complete change of old for new once in about seven years (in some cases it may be five, and in others ten); but the qualities of those new particles are precisely the same as those of the particles displaced.

It would be highly proper for a person who has been medicating for scrofula or syphilis, to be revaccinated. Remedies employed for such purposes act chemically upon the blood, and would be as liable to eradicate cow-pox as any other blood-poison. After a patient has been through a course of medication for his blood, the treatment, if efficacious, leaves his blood as pure as nature makes it; and the properties imparted to it by vaccination, will have been swept away with the other unnatural humors, or animal poisons; but a person so physically regenerated, should exercise great caution in again giving his blood the cow-poison. To him, and to all, I would say:—To prevent disease in vaccination, use only the vaccine from

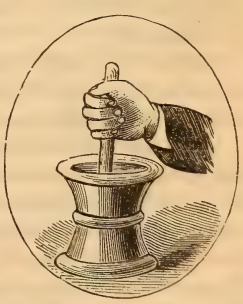
the cow. The further removed the patient is from the original virus, the less a preventive of small-pox is the vaccination, and the more he receives of an accumulation of impurities through the virus of various persons from whom the matter has been taken. To-day, a person has been vaccinated with cow-pox. In a few days the matter is taken from his arm, and with it, some constitutional or contracted blood-impurity; and it is put into the arm of another. Again, the matter containing the impurity of the first and the further bad qualities of the second, is conveyed to a third party. During all this time, its qualities to prevent small-pox are being modified, and its characteristics changed by the addition of diseased humors with which the various persons inoculated are affected, until finally the eighth or tenth person vaccinated, receives little but the accumulated impurities of those through whom the matter has been conveyed.

In conclusion I will say, that with proper caution, vaccination is a blessing; without it, a curse. In our large hospitals, supported at the expense of the public, means might be employed for keeping the genuine cow-pox within reach, and by inoculating several cows with it when there are seasons of great demand, a supply could be furnished, sufficient to meet the wants of the people. A statute should then be enacted to secure the safety of all undergoing vaccination.

Adulterated Medicines.

That man's cupidity should so far transcend his native humanity as to lead him to imperil the lives of thousands of his fellow-beings by the base adulteration of those things to which the sick resort for relief from their physical sufferings, thus depleting their pockets simultaneously with corrupting the vascular and nervous fluids of their already enervated systems, is a fact almost sufficient, one would suppose, to destroy what little confidence men do entertain in the integrity of each other.

Fig. 58.



THE HAND THAT DOES IT.

The extent to which the adulteration of medicines is carried, is truly surprising. Says Normandy, "adulteration is a widespread evil, which has invaded every branch of commerce: every thing which can be mixed, or adulterated,

or debased in any way, is debased." The report of the examiner of New York for ten months, ending April, 1849, made it appear that "about 90,000 lbs. of various kinds of drugs were rejected and refused admittance at this port alone. Among these were 3,000 lbs. of opium, 5,000 ounces of iodine, 16,000 lbs. of rhubarb, 34,000 lbs. of spurious yellow bark, and 12,000 lbs. of jalap." I have not taken pains to obtain later reports, but I am satisfied the evil of adulteration is rather increasing than abating.

A writer remarks that "more than half of many of the most important chemical and medicinal preparations, together with a large quantity of crude drugs, come to us so much adulterated, or otherwise deteriorated, as to render them not only worthless as medicines, but often dangerous."

Nearly all kinds of vegetable medicines, such as sarsaparilla, yellow dock, elder flowers, uva ursi, rhubarb, Iceland moss, and other useful roots and herbs which are thrown into the medicine market, are either adulterated in such a way as to elude the detection of those unacquainted with the botanical description, fragrance, and flavor of the pure articles, or have been rendered inefficient by being gathered at the wrong season of the year. Many herbs and roots used in my practice, I have been compelled to have gathered by my own agents, in order to have them possess that genuineness and efficiency necessary to produce a successful result in obstinate cases.

It is impossible for a physician to predict, with any certainty, the effects of a prescription upon a disease, if it be prepared from the ingredients furnished by most medicine dealers, however honorable, for if they do not themselves practise adulteration, those of whom they purchased may have done so, and the worthlessness of any root or herb cured in the wrong season, can only be determined by a trial of its strength.

Those who reside in the country, surrounded with the numerous antidotes which nature furnishes for the diseases of mankind, might easily avoid this species of imposition, and do much to preserve and restore their own health, by acquiring a little knowledge of the medicinal properties of the numerous plants springing up about them, and preserving, in their season, such as are valuable in sickness. It is true that adulterations in roots and herbs are not so positively injurious as those of mineral medicines, which I shall soon consider, but time is too valuable in sickness to be

trifled with by the administration of medicines of an uncertain efficacy.

The Botanic System of practice has not gained that high reputation for success which it would have gained, had its practitioners been their own botanists, and gathered by their own hands, or by those of agents of integrity and ability, *in their season*, the many health-restoring plants which they rely upon in the treatment of the sick.

The industrious farmer knows how difficult it is for him to buy as good corn, potatoes, eggs, and butter in the city markets, as he can raise himself. Now, it is just as difficult for the botanic physician to purchase at random, at the medicine stores, as efficient medicines as he can collect through private sources with a little extra trouble and expense.

I have cured hundreds of cases of difficult chronic diseases with botanical medicines *bearing the same name* as those the invalids had been using for weeks and months without benefit, under the direction of other physicians, which fact can only be explained by the supposition that adulteration, or carelessness in curing, had been practised upon those administered by my medical contemporaries.

There are, of course, some medicinal vegetable productions of foreign countries, which we can only get by importation. Nearly all are generally more or less adulterated, which fact should lead the careful physician to double diligence. Indian opium, for instance, is often adulterated with mud, sand, powdered charcoal, soot, *cow-dung* (hold your stomach, opium eater)! powdered poppy-petals, and powdered seeds of various descriptions. Smyrna scammony frequently contains chalk, guaiacum, jalap, sulphate of lime, gum tragacanth, bassorin, etc., and some samples are met with which do not possess a particle of that drug which it is pretended to represent. The Mexican jalap is of two varieties, one of which is almost worthless. The latter is called male jalap, and often comes mixed with the better article, and sometimes unmixed. The Spanish liquorice is also much adulterated. Hassal found in twenty-eight samples of the powdered, *eleven* which were adulterated, and the extract can seldom be obtained pure.

When so much injury results from the adulteration of vegetable medicines, what shall be said of those arising from the adulteration of mineral medicines, whose counterfeits are often more pernicious in their effects than the genuine? According to Normandy, Bingley,

and Wakley, calomel is adulterated with chalk, sulphate of barytes, white lead, clay, sulphate of lime; mercury, with lead, tin, bismuth; mercurial ointments with Prussian blue, clay, etc.; nitrate of silver with nitrate of potash, and so on through the whole catalogue of mineral remedies.

Why, the disclosure of this wholesale deception in drugs and medicines is enough to make a man see red and blue lights in the apothecaries' windows, if all the "big bottles" of colored fluid were taken out. It is no wonder that the patients of old-school physicians make up ugly faces at their family doctors, and call them hard names. Mineral doctors, under the most favorable circumstances, are unsuccessful enough, without having their already uncertain remedies perverted.

As a general rule all internal medicines, whether vegetable or mineral, are potent for good or evil. They seldom have a passive effect, but a positive, or negative. It is all important, therefore, that they should be just what the prescriber supposes them to be, or serious mischief must necessarily occur. It is always advisable, when possible, for *the medical practitioner to prepare with his own hands the prescriptions he would give to his patients.* And if he aims to know *precisely* the effect any medicine will have on a disease, he himself must also collect, or have carefully collected, through trusty agents, the ingredients which enter into its composition. Any thing like an approach to unerring success is *impossible* without these precautions. Although the records of crime indicate that mankind places a trifling estimate on human life, its most depreciated value is quite too great to warrant the carelessness which is often manifested in the preparation and administration of drugs, particularly when the extent to which adulteration is practiced is so widely known among the intelligent members of the medical profession. I most candidly confess that one of the secrets of my success lies in the fact, that I spare neither labor nor expense in obtaining the best things from the vegetable kingdom that mother earth furnishes for the ills of mankind.

Brutality and Inhumanity.

Shocking instances of brutality and inhumanity are constantly straining the nerves of all good people, and affecting to a frightful degree those who are finely organized physically. Some people delight in whipping horses; others in kicking dogs; and there are

those who cannot pass an animal of any kind without hitting it with stick or stone. Almost everybody seems to enjoy to some extent the destroying of life. Boys, for the mere fun of the thing, catch flies in order to kill them. Very bad boys delight in putting pins through insects, and fastening them to boards to watch their painful writhings and flutterings. Older boys and men find pleasure in shooting little birds, rabbits, squirrels, and other pretty animals the Creator made to beautify and enliven the landscape. Very bad men enjoy pummelling and killing each other. In brief, nearly all men possess the impulse, to some extent, to destroy life. It is small in those who simply like to step on worms, pull the wings from flies, and catch and torture the busy honey-bee; but at the same time this is one of the worst and most inexcusable exhibitions of the impulse. It is larger in those who can entertain themselves for days and weeks with guns on their shoulders, searching the wood and stream for something to destroy, merely for the pleasure of taking life. It is tragically enormous in men who delight in the carnage of war; who boast how much they like to fight; and who can look with fiendish complacency upon the bleeding form of a brother slain; but it presents the dimensions of a fiend incarnate, and a power incomprehensible even to those we commonly esteem as bad, when it compels a man in the absence of any serious provocation, to murder a large family, as illustrated in the case of Probst. As I see the wasp, ever ready to inflict his sting; as I read of the serpent, ever alert for an object into which he may fasten his poisonous fang; when I am told by the traveller of the blood-thirsty habits of the tiger, the panther, and other animals of this class, I sometimes think that this disposition to inflict pain and destroy life, is, in a measure, derived from man. Man fills the whole animal world with magnetism bearing more or less of his qualities of mind and disposition. Place a good man for a while in the magnetic atmosphere of those who are bad, even if the latter be mute or asleep, the good qualities of the former will be, in a measure, modified. No one can habitually live in the atmosphere of wicked people without

Fig. 59.

AN ILLUSTRATION.

being to some degree contaminated. There are places which good men cannot enter without having their moral nature somewhat injured. Now, if men are so under the influence of their fellow-men, may not the inferior animals also be affected by the moral atmosphere of mankind. We find where men are the most savage, most brutal, and most given to the pastimes of torturing and killing; that there, too, animals of all kinds exhibit the most blood-thirsty instincts. The same animals removed to regions of civilization, and among men of greater kindliness of feeling, lose very much of their savage disposition; and, too, these ferocious animals are often subdued by the presence of one noble, generous man. Look at the story of Daniel in the lions' den—thrown there by his persecutors. How confident the haters of Daniel were that those lions would fall upon, and destroy him. This has often been counted a miracle, and indeed it must have been, if it was not the overpowering magnetism of good radiating from Daniel's noble nature which overcame the ferocity of the beasts. All successful tamers of ferocious animals, as well as our best horse trainers, are men of kind hearts. It is impossible to subdue the tiger with a club, or a vicious horse with a whip; and may it not be that the promised millennial era, "When the lion and the lamb shall lie down together," will make its advent on earth so soon as man shall have subdued all his cruel passions—so soon as he shall recognize the rights of animals of every grade, to exist and enjoy life—shall love his neighbor as himself—and shall love every thing that creeps upon the earth, because his Father made it.

The health of the nervous system of many good people is, as it were, sacrificed by their being compelled to witness cruelty to animals. The more sensitive are shocked at cruelty to insect life; but all noble souls tremble in their nervous centres when they see horses lashed; dogs kicked; and other animals rudely treated. No really generous, kind-hearted man can see the songsters of the forest, and the quadrupeds which enliven wild and uninhabited resorts, shot down from pure wantonness, without experiencing a feeling detrimental to the nervous harmony.

Inhuman conduct between man and man, however, produces the greatest discord in the nervous system. It not only affects injuriously the perpetrator and victim of the cruel act, but it convulses the nervous systems of those who witness it, and those in the radius

of thousands of miles, who may read, or be told the affecting tale. Burns, ever glowing with sympathy, never uttered truer poetic words than those in which he said :—

> "Man's inhumanity to man
> Makes countless thousands mourn."

It is shamefully the rule, instead of the exception, that men, created, as we are told, in the image of God, do not treat each other more kindly. Selfishness abounds everywhere, and constantly generates a spirit of inhumanity. This, in turn, leads to acts of cruelty, and when these culminate in murder, then again we witness the inhumanity of scores of people gathering in mobs to be revenged upon the unfortunate murderer; and the law, through its officers, jealous of its inhuman prerogatives, protects its victim, not only from the ferocity of the mob, but with stomach-pump takes from the wretched man the poison he has swallowed, in order that it may have the satisfaction of putting out his poor life; and when he has sufficiently recovered from this fearful attempt upon his life, he is conducted, tremblingly, to the guillotine, the garrote, or the hangman's scaffold! Readers, not one in ten of you have stopped to consider the moral and physical injury the human family suffers from the inhuman practices of beheading, choking to death, and hanging those who, through unfortunate mental organization, or more unfortunate circumstances, commit murder or other crime. The effect upon the child, and in fact upon all, is to create the impression that murder is justifiable, if the provocation is what the law regards a capital offence; and the result is that many people, impatient of the law's delay, take, as they say, the law into their own hands, making themselves judge as well as executioner. This is true, not only of mobs organized to lynch and kill some offender, but often of individual action. A man feels himself aggrieved by the supposed or real injustice of another; thinks he ought to be killed; and fearing or knowing that it cannot be effected by due course of law, he does the bloody work himself, after arraigning the accused before his own excited imagination, and pronouncing sentence of death upon him. Now, if law will not countenance killing for any cause whatever, will it not have a healthful effect upon the passions of men who are now taught by its example that killing is right under certain circumstances, and by methods prescribed by law, and who, consequently, convinced in

their heated judgment that some enemy of their happiness should be killed, proceed at once to do the murderous work. Would it not be far better to teach our children, as they are growing up, impressible and easily moulded, that no one, ruffian or sheriff, has a right to slay his fellow-man; that the life of every human being is in the hands of God, and that He shall determine when any disturber of the peace shall die? Is it, indeed, reasonable to suppose that the Almighty, when the instrumentalities within His reach are so numerous for removing wicked men, if He chose to do so in any particular case, should brutalize man by making him the instrument? Should not the law be made a good exemplar, in order that immature minds may be correctly formed, and those which have received the development of adult age, impressed with the sacredness of human life. There is no difficulty in placing the murderer where his existence will no longer be dangerous to society. Let it be the law, if necessary, that men guilty of capital offences shall not be pardoned by President, by governors, or other officials, and we may safely await the providence of God, as to when our erring brother shall be called before the great tribunal. So long as the law recognizes murder as necessary in some aggravated cases, individuals will entertain the same sentiment, and act upon the conviction. While writing, my eye falls upon a newspaper containing the following paragraph, dated at the office of Wells, Fargo, & Co., San Francisco :—"San Juan and Nevada stage robbed at four A. M. of $3,000; reward offered at seven A. M.; robbers shot and all the money recovered at two P. M.; coroner's inquest at three P. M.; funeral of the thieves at six P. M. The foregoing programme of a 'spirited little affair,' came off on the 15th of May. First part of programme not so pleasant as the last." Of course all of this must have been done under the law of Judge Lynch, and as the newspaper seemed to regard it as a cute way of disposing of such matters, it is presumable that public sentiment also approved of it. With this and other precedents in mind, somebody will shoot his neighbor for invading his orchard; some lover send cold lead into the heart of his rival; and some fellow, in a bar-room brawl, plunge the fatal knife into the breast of his adversary; for each one feels that the object of his dislike should be speedily put out of the way, and that killing is not, in all cases, morally and legally wrong.

It is urged by many that capital punishment restrains people from

committing crimes for which that penalty is inflicted; but statistics show that more murders are committed in Massachusetts where the death penalty is rigidly administered, than in Wisconsin where it has been for several years abolished. People laboring under violent passion seldom pause to consider consequences; while, as before remarked, the fact that public opinion and the law approve the taking of life in some cases, affords them an excuse for so doing: for they frantically imagine, for the moment, that there never was so great a provocation—never a better cause for the adoption of extreme measures.

The death penalty, happily, is becoming unpopular, though too slowly. In the earlier period of man's history, a murderer was pursued and slain by the friend of the murdered man. The early Hebrews punished blasphemy, disobedience to parents, desecration of the sabbath, idolatry, witchcraft, and many other misdemeanors, with death. The Athenians considered people guilty of open disrespect for religious rites or popular faith, deserving of the death penalty. From those earlier periods to the present time, public sentiment has been slowly, but steadily, undergoing a wholesome change, and laws have, accordingly, been made more humane. It is, however, only about seventy years ago that a woman was hung on Boston Common for snatching a bonnet and reticule from a lady on one of the streets leading from Fort Hill. It was pronounced a clear case of highway robbery, upon which charge she was convicted, and for which the penalty was death. To-day, in New York, only the crimes of treason, murder, and arson are visited with the death penalty. In Michigan no hanging has been done for twenty years; in Wisconsin, none for thirteen years; in Rhode Island, none for fourteen years; in Illinois, through the active efforts of the Hon. H. Bovee, the statutes have been so modified that the power is vested in the jury to decide whether the penalty shall be death, imprisonment for life, or imprisonment for a term of years, in cases of felonious homicide. Even Europe now promises to expunge this relic of barbarism in advance of republican America! Italy has abolished capital punishment throughout the kingdom. Tuscany abolished it in 1765, and twenty years or more after, Duke Leopold decreed the perpetuity of the reformed penal code, stating that—"Instead of increasing the number of crimes it had considerably diminished that of the smaller ones, and rendered those of an atrocious nature very rare." In 1830,

M. Berenger reported to the French deputies that—"The mildness of the penal legislation had so far improved the character of the Tuscans, that there was a time when the prisons of the Grand Duchy were nearly empty."

"Opposition to the death penalty," observes a newspaper writer, "is making steady progress throughout Europe. It has been nearly discontinued in Portugal, Oldenburg, Anhalt, Nassau, Roumania, Bremen, the Swiss cantons of Freyburg and Neufchatel, and it is seldom if ever carried into execution in Wurtemberg, Baden, Bavaria, Brunswick, and the Swiss cantons of Zurich and Glarus. Belgium has readopted its former system of a virtual suspension of capital punishment. In Russia the death penalty has long been abolished for murder and for non-political crimes. No execution has taken place in Portugal for 21 years, in the cantons of Freyburg and Neufchatel for 36 years, and in Tuscany for 37 years. The bill for the abolition of capital punishment in the Kingdom of Saxony, to which we have already referred, was adopted by the Chambers with the cordial concurrence of the Government, the *Procureur-General* of Saxony being the principal defender of the bill." In every country of Europe the opponents to the death penalty constitute a large and growing party.

One of our largest daily journals, and unfortunately an advocate of the death penalty, in advising the employment of an official hangman, an American Calcraft, supports its suggestion with a narrative of the following shocking incidents:—"A short time ago we had three executions on a single day—one at Elmira, one at Charleston, and one in this city. Subsequently a murderer was hanged at Wilkesbarre, Pennsylvania, and on Friday last another suffered death at Troy. In all these cases the criminals died of suffocation. Their necks were not broken, and the scenes at their executions were of the most disgusting character. One man, we are told, lived for twenty minutes, drawing himself up every few seconds in his struggle against death. Another bounded up and down at the end of his cord, and then breathed for a quarter of an hour afterward. At the Wilkesbarre-hanging the people of the adjacent country made it a gala day, coming out in holiday attire, crowding about the neighborhood of the jail and climbing trees in order to get a sight at the show."

The foregoing may be quoted without any comments whatever on

the part of the opponents of the death penalty. It is hard to devise means to kill people humanely. It strikes me that the way in which it may be done with the least suffering to the unfortunate culprits, would be to drown them as they drown dogs at the pound in this city. At that place an immense car is filled with the animals, and is made to descend by a perpendicular scaffolding to the bottom of the river. If we should serve our criminals in this way we should at least save ourselves from beholding their last agonies.

In some of our Southern States, in addition to the gallows, the whipping-post remains standing, and in a few of our Northern prisons, convicts are showered with cold water, and some are occasionally killed by the shock. This showering is inflicted for disorderly conduct. In a majority of the States the death penalty is inflicted for the crime of murder.

When statute law ceases to provide physical torture as a punishment for crime, we may reasonably hope to see less cruelty exhibited by man toward his fellow-man, and to the lower orders of animal life. Remove this barbaric example from high places and the influence will be Christianizing to the whole human family; and with this regeneration of man, even the ferocity of beasts will ultimately be subdued by the magnetic power of benevolence and fraternal love. This is not too much to hope for by those who heartily believe in the predicted millennium; but let us not lose sight of the sanitary motive for reform in this particular. Let every one remember that all cruelty, and all inhumanity is not only felt by the victim thereof, but by all good men and women who are cognizant of the violence or unkindness, and that their nervous systems are seriously impaired by all that is commonly and correctly denominated "Shocking," and that the perpetrator suffers physically, to some extent, in consequence of the allowed presence of the passions which instigate him to commit the offence. Let me also add that it would greatly conduce to health of nerve, if people of delicate organizations would suppress the morbid taste or curiosity which leads them to witness a stage, or real tragedy; which makes them attentive readers of a tragical story, or accounts of actual murder; which induces them to apply to the sheriff for permission to witness the dying convulsions of a convicted murderer, or fly to the newspaper for the harrowing description of the last moments of the condemned man. Let us rather try, so far as possible, to turn away our eyes from the bloody acts of depraved

human nature and barbaric laws, and thus preserve our nerves in tranquillity while watching and applauding the examples of the good, and trying to make kindness of heart a quality of earnest and universal aspiration.

Wealth.

Wealth, with its attendant dissipations, is a prolific source of nervous derangements and blood-impurities. Many physiologists have described money as the "elixir of both mind and body." Dr. Hall, in his Journal of Health remarks as follows:—

Fig. 60.

HORN OF PLENTY.

"This idea of the hygienic value of money on men is strikingly illustrated in the report of M. Vallerme, secretary of the poor-house commissioners in Havre, where the average age of the rich is twelve years greater than that of the poor. Thus, 1,088 prosperous persons died at an average age of 42 years; 4,791 of the middling classes at 29 years; and 19,849 poor at 20 years."

Now these statistics, at first glance, look like "knock-down arguments;" but those who argue from them that wealth is a promoter of health and longevity, overlook one important consideration which strikes at the very root of their philosophy, to wit: *health begets wealth, instead of wealth begetting health.* It must be remembered that a large proportion of mankind is born into the world with hereditary disease or enfeebled constitution, which disqualifies them for the active pursuits of life, and consequently, unless they become heirs to wealth they must live and die poor. Look over our country now, and learn the history of its wealthy men; what do we find? two-thirds at least have been the architects of their own fortunes. They have amassed their wealth by that indomitable perseverance and industry which they could only have maintained under the encouragement of vigorous physical organization. What chance has the invalid to gain wealth, or even a competency? He is interrupted in his business pursuits by the visitations of disease, and the harvests he may reap during the intervals of comfortable health, are at once absorbed in the expenses of sickness which follows. If, as the statistics indicate,

the average age of wealth over poverty is only twelve years, the argument is in favor of the latter: for if, with good health to start with, and subsequent wealth to enable them to live as they choose, rich people cannot exceed an average of twelve years over a class, a majority of which is born in sickness and physical deformity, we may justly conclude that wealth, with its usual dissipations, shortens the lives of its possessors. Dr. Hall has fallen into the same error that many other physiological writers have in treating on this subject.

Men who have been gifted with that mental and physical energy, united with extraordinary powers of endurance, which has enabled them to stem with success the opposing currents of life, ought to live from twenty to fifty years longer than the sickly crew who follow in their wake with spirited oars to-day, and exhausted strength to-morrow. But it appears they can only average twelve more, and probably these are obtained from the extraordinary longevity of the minority of wealthy men, who have attained remarkable age in consequence of an adherence to temperate and industrious habits, unallured by the vices of wealth.

A *few* men use riches as if they were a loan from God—strewing the paths of indigency and suffering with blessings; *many* men value riches only because they enable them to live in sluggish idleness—to glut their bellies with besotting wines and rich viands—to gratify in full measure their stimulated passions, and dazzle the world with glittering gew-gaws. The former possess placidity of mind and harmony of body; the latter, mental uneasiness and physical debility, and from the dissipations of these arise the common evils of wealth. The mind, under constant excitement, the blood hot with excessive stimulus, and the muscles paralyzed with habitual inactivity, cannot fail to destroy the tone of the nervous and vascular system.

There is a happy medium between wealth and poverty, which promotes physical health and social comfort, and beyond this boundary it were well if none could pass. Inasmuch as man can carry nothing with him at the close of life except a record of good works, he who possesses a competency during life enjoys all the pleasures that money can buy, without surfeit. But some wish for wealth to be enabled to do good. An excellent lesson for such may be found in the life and sayings of Socrates: A Grecian youth, who saw the errors and follies of the people, and wished to reform the world, exclaimed: "Oh,

that I were rich, and famous as an orator, I would move the world so soon! Here are sins to be plucked up, and truths to be planted. Oh, that I could do it all! I would reform the *whole world*—and that so soon!" Socrates, hearing the youth, said: "Young man, thou speakest as silly women. This gospel in plain letters is written for all—'LET HIM THAT WOULD MOVE THE WORLD, MOVE FIRST HIMSELF.' It asketh neither wealth nor fame to live out a noble life. Make thy light thy life; thy thought thy action. Others will come round, and follow in thy steps. Thou askest riches to move the world. Foolish young man, as thou art, begin now. Reform thy little self, and thou hast begun to reform the world. Fear not; thy work shall never die."

The general tendency of wealth is not benevolence, but prodigality, selfishness, idleness, and gluttony. There is more true benevolence exhibited by the poorest than the wealthiest classes. Hon. Geo. S. Hilliard has beautifully remarked—"I confess that increasing years bring with them an increasing respect for men who do not succeed in life, as those words are commonly used. Heaven is said to be a place for those who have not succeeded on earth; and it is surely true that celestial graces do not best thrive and bloom in the hot blaze of worldly prosperity. Ill success sometimes arises from a superabundance of qualities in themselves good—from a conscience too sensitive, a taste too fastidious, a self-forgetfulness too romantic, a modesty too retiring. I will not go so far as to say, with a living poet, that the 'world knows nothing of its greatest men,' but there are forms of greatness, or at least excellence, which 'die and make no sign;' there are martyrs that miss the palm, but not the stake; there are heroes without the laurel, and conquerors without the triumph."

The view I take of the *physical* effects of riches is sustained by Dr. Channing. He gives it as his opinion that the difference between the rich and the poor in regard to physical suffering is not as great as has been imagined, in support of which he says: "That some of the indigent among us die of scanty food is undoubtedly true; but vastly more die from eating too much than from eating too little; vastly more from excess than from starvation. So as to clothing, many shiver from want of defence against the cold; but there is vastly more suffering among the rich from absurd and criminal modes of dress which fashion has sanctioned, than among the poor from deficiency of raiment. Our daughters are oftener brought to the grave

by their rich attire, than our beggars by their nakedness. So the poor are often over-worked; but they suffer less than many among the rich who have no work to do nor interesting object to fill up life; to satisfy the infinite cravings of man for action. According to our present modes of education, how many of our daughters are victims of ennui, a misery unknown to the poor, and more intolerable than the weariness of excessive toil."

Failures in Business.

Of those casualties which, through their depressing influence upon the mind, disturb the harmony of the nervous system, there are none, which prudence has power to avert, more prolific of nervous derangements than failures in business. In fact, financial prosperity often sustains men in apparent health, whose systems are loaded with diseases in embryo, and the first stroke of misfortune which causes the brain to withhold and consume within itself the measure of vital electricity which it habitually dispenses to the various organs of the body, removes the restraining power which holds the latent disorders of the system in check, and, all at once, the unfortunate business-man becomes the tenant of a sick-bed, or the inmate of a lunatic asylum.

Fig. 61.

OTHELLO'S OCCUPATION GONE.

The human brain sustains a similar relation to its dependency—the body—that the bank does to the commercial world. Its medium is not "rags," but vital electricity; and its depositors and patrons are not merchants and manufacturers, but organs and functions. When trouble overtakes a man, a physiological "panic" ensues, and the brain discounts sparingly. If a "run" is made upon it, it partially or wholly "suspends." The process of digestion and the action of the heart, liver, lungs, kidneys, etc., are dependent upon the vital electric forces emanating from the brain, and when the latter is over-exercised with trouble and hard thinking, it reserves its electricity for its own use, leaving the body only partially supplied; and if the organs retaliate by denying nourishment to the brain, as they are obliged to do, in a measure, the delicately-organized man

becomes a lunatic, and the vigorous man, whose system is filled with inflammatory matter, a victim to some corporeal disease, acute or chronic.

"Hard times" invariably increase the labors of a physician, although they do not always increase the gold in his coffers. A bankrupt man is generally an invalid, a prostrate patient, or a mental imbecile. The commercial revulsion of 1857 increased the number of inmates in lunatic asylums more than twenty-five per cent., and in Pennsylvania, where its effects were the most immediately and severely felt, the Insane Hospital in West Philadelphia, and the State Asylum at Harrisburg, were filled to the extent of their accommodations. Such were the commotions between mind and matter, that many severed the unhappy relation existing between the two by suicide. Failures in that year were numerous, and disease, insanity, and suicide increased *pro rata.*

Such being the effects of business failures upon the health of a people, they should be avoided, as far as possible, by prudence and economy. "Live within your means," is an old and good proverb, and he who does not, almost invariably brings upon himself nervous derangements which are sure to lead to fatal results.

Every married man should confide to his wife the real condition of his finances. Much is said of the extravagance of married ladies. Their conduct is often pronounced the cause of their husbands' ruin. Much truth is uttered in such assertions, but not the whole truth. Men are apt to represent their pecuniary resources much greater than they actually are. As a sequence, wives laugh at their admonitions of economy—think their consorts "stingy"—and govern their wants by the supposed capacity of their purses. Nothing short of a failure reveals to them their insolvency.

The wife's condition, under the most favorable circumstances, is a hard one, and she cannot be blamed for reaching for the good things of life, if her husband leads her to believe he is rich, particularly if he gives plausibility to her delusion by indulging in such superfluities as Havana cigars and expensive wines.

It is high time that men began to appear to their wives exactly what they are, pecuniarily, morally, and socially. Frankness in these respects would not only tend to lessen the number of business failures, but would greatly diminish the evils of prostitution. But deception, in most cases, commences in the moonlight nights before

marriage, and continues until some pecuniary or physical disaster reveals things as they are. This sometimes happens unexpectedly early. Fowler gives an amusing illustration in commenting on the motive which induces many to marry :—

"A *distinguished* young man from the South, making great pretensions to rank and wealth at home, paid attentions to a young lady residing near New York Bay, whose father had been very wealthy, but owing to reverses had become quite reduced in circumstances; still, the family maintained their style, and the display of affluence equaled fully what it had been in their palmier days, and, by so doing, sustained their reputation in society, in order to allow the young ladies a better opportunity of settling in life. The new-comer, prompted by the desire of securing the prize, and thinking she possessed sufficient of the 'needful' to pay all expenses, dashed out in fine style, ran into every extravagance, and displayed the fastest and most beautiful horses, etc. Finding debts accumulating and becoming pressing, he hurried on the wedding day, this being the only prospect for their discharge. Meanwhile, she, not suspecting that he had falsely represented his situation, and delighted at the idea of obtaining so liberal and generous a husband, encouraged his expenses, and was profuse herself, thinking he had the means to settle the bills. They were married—when, to their astonishment and shame, they found themselves not only destitute of the means to discharge their liabilities, but unable to buy the necessary furniture for housekeeping."

Deception on both sides rather hastened the result in this instance. Had it only been practised by the gentleman, the lady really possessing the supposed wealth, the deluded wife would have probably put her fortune into a princely establishment, relying on his purse for its maintenance, when a failure involving extensive loss would have ultimately followed.

There are unquestionably some wives who, with full knowledge of their husbands' limited resources, endeavor to vie with their wealthiest neighbors, and bring upon their indulgent providers premature ruin and death. Such, however, are exceptions, and when the grave closes over the victims of their foolish extravagance, they bitterly reflect on the errors of their conduct.

Running in debt to an extent beyond all present prospect of liquidation, is a common cause of failures in business. This error is almost characteristic of the Yankee, whose enterprising spirit leads

him to embark in hazardous speculations. His organ of "Hope," generally predominates over his "Causality," and "Caution," and, urged on by largely developed propelling faculties, he frequently finds himself in deep water, without plank or life-preserver. He is too, of all men, least calculated, physically, to endure reverses, for although he may succeed, by his indomitable will, in buffeting the waves of adversity, his physical health suffers from all such encounters. Here, too, the proverbialist whispers—"Live within your means."

Dishonesty causes many failures. Let one man of extensive reputation and high standing in the commercial world, turn trickster and defraud a bank or railroad of a large sum of money, and the whole community suffers. Public confidence is shaken. Men who have contracted debts with a good prospect of being able to pay, cannot extricate themselves from an unexpected dilemma. Failure after failure follows in the wake of the defaulter, destroying the prospects of many careful as well as careless men. Do defaulters ever reflect that their dishonesty carries thousands to premature graves? Observation proves such to be the fact. But reckless men seldom look at consequences, and if they can only raise themselves from the ashes of a financial ruin, which their dishonesty has brought upon a community, their humane curiosity is not sufficiently awakened to inquire how many have been buried in it. Burns truly said, "Man's inhumanity to man makes countless thousands mourn."

Commercial men, who are supposed to regulate the monetary affairs of the world, should realize the powerful influence they exert over the physical well-being of the race. Recklessness by the few should not be tolerated by the many, or at least, not countenanced. Every "false step" brings with it multitudinous failures, and failures in business produce depression of mind, and depression of mind disturbs the harmony of the nervous system, and this leads to mental and corporeal diseases of every variety, according to the predisposition of victims. Do not strive to acquire sudden fortune. Remember that contentment is wealth, and that there is no real wealth without it. He who passes through life with a sufficiency of food and clothing, and a contented heart, has the benefit of all the wealth the world possesses.

Excessive Study.

"The mind, just like the stomach, takes
Its food for pleasure, profit, use,
Reflection all the virtue makes,
And serves it for its gastric juice."

The mind may be overloaded as well as the stomach. Reading too constantly and studying too closely, is as injurious to the mind and nervous system as is eating too much to the stomach and blood. The back doors of many of our colleges and seminaries open into lunatic asylums and cemeteries. The literary world is full of physical wrecks, and many a mind has become bankrupt by trying to acquire knowledge too fast, like the ambitious business-man who fails, through his over-exertions to get rich. Avarice for knowledge is generally more successful than avarice for money, but while the failure of the former leads to an empty head, that of the latter only leads to an empty pocket. Every man is born into the world with a certain amount of mental capacity which will admit of cultivation, but not of forced growth. By gentle discipline the mental powers of a man will gradually develop, and reach maturity as early as good physical health will permit, but when the student attempts to crowd his mind with learning all at once, he not only fails to reach the high summit of his inordinate ambition, but often falls a helpless imbecile.

Fig. 62.

THE STUDENT AT HIS BOOKS.

"Professor Houghton, of Trinity College, Dublin," says a newspaper writer, "has published some curious chemical computations respecting the relative amounts of physical exhaustion produced by mental and manual labor. According to these chemical estimates, two hours of severe mental study, abstract from the human system as much vital strength as is taken from it by an entire day of mere hand-work. This fact, which seems to rest upon strictly scientific laws, shows that the men who do brain-work should be careful, first, not to overtask themselves by too continuous exertion, and secondly, that they should not omit to take physical exercise each day suffi-

cient to restore the equilibrium between the nervous and muscular systems.

Studies, to be improving, must be pursued with a relish, the same as good edibles are sought after by the epicure. If the mental appetite is too craving, gratify it sparingly, as every man should his corporeal appetite; if too dull, nurse it gently. An observance of this rule will prevent our institutions of learning from sending thousands of *mental dyspeptics* into the world to flash and flicker with intellectual light, and then go out like a used-up tallow candle.

Excessive Labor.

"The night is come, but not too soon,—
The laborer's hand is weary growing."

Foolish pride and aspirations for wealth more frequently than necessity, drive men to excessive labor. Both the mental and physical system demand rest, and inflict a penalty on the individual who refuses to grant it. Not only has nature ordained night as a season of repose, but the God of nature has commanded that one day in each week shall be observed as a period of rest for all human beings, and has so impressed the necessity of such a regulation on the human mind, that, however diverse may be the religious opinions of different people, all have a day *professedly* set apart for that purpose. Thus, Sunday is appointed by the Christians, Monday by the Grecians, Tuesday by the Persians, Wednesday by the Assyrians, Thursday by the Egyptians, Friday by the Turks, and Saturday by the Jews. The strict observance of the day is, however, unusual. The business man, although he be a constant attendant at church, is apt to look over his accounts and lay down his programme for the week, while the literary character meditates on what he will write or speak, regardless of the sentiment of the Roman philosopher, Seneca, who said that "the mind of man is like the fields, the fertility of which depends on their being allowed a certain period of rest at the proper season." And a great deal of this over work is for the frivolous purpose of driving

Fig. 63.

THE OVERWORKED MAN IN HIS COUNTING-ROOM.

a prettier span of horses than some neighbor, wearing a finer coat, holding larger estates, or possessing more of that attractive commodity—gold! The best remedy for this evil is *contentment.* This should be cultivated, for it is *wealth.* A contented man with fifty cents in his pocket, and a clear conscience, is far wealthier than the millionaire, whose Sunday, week-day, and night dreams are all about gold, and how more may be accumulated. Dismiss your avocations, all who can, at night and on Sundays, and acquire contentment if you would preserve your nervous systems in health, and your minds in happy placidity. There are, it is true, many so pressed with want that they can hardly do so. Our sewing-women are the most unfortunate representatives of this class; but even they would be able to accomplish more in the end by religiously observing some hours for rest, divided between sleep and out-of-door exercise. Sickness, and consequent compulsion to entirely abstain from work for weeks and months, would not occur so often, if those who are obliged to support themselves by the needle would pursue this rule. A healthful position can hardly be maintained in plying the needle steadily, in consequence of which the activity of the vital organs is interrupted, and the circulation of the blood impaired. Exercise of some kind every day, and a reasonable amount of repose every night, are absolutely necessary to preserve health of body and mind. To assist in preserving the strength of the eye, it has been wisely suggested by the Surgeon of the Royal Ophthalmic Hospital of London, that "needle-women, embroiderers, etc., should work in rooms hung with green, and have green blinds and curtains to the windows. In China, this rule is adopted by the exquisite embroiderers of that country."

Melancholy.

Some writer has facetiously remarked that "there are many people who keep pet griefs as certain other people keep lap-dogs, that they carry about with them wherever they go. These are the people who feel the best when they feel the worst, and are never so happy as when they are utterly miserable. Like the maiden 'who milked the cow with the crumpled horn,' they are always '*all* forlorn,' and they keep a figurative dog to be 'tossed,' and a cat to be 'worried,' and a rat to be 'killed' upon every possible occasion. They turn down the leaf at, 'Oh, that my head were waters, and mine eyes a fountain

of tears,' as if griefs were like bulrushes, and flourished best in wet places."

Melancholy seriously disturbs the circulation of the nervo-electric forces, and causes an undue consumption of the latter in the brain. Melancholy people are almost invariably dyspeptic, because a full supply of the electric element is withheld from the pneumo-gastric nerve, which conveys from the brain the force that gives tone and activity to the digestive organs. Despondency of mind, in fact, affects all the organs of the system, more or less, on the same principle; the brain consuming, in its excitement, more than its natural allowance of nervo-electricity, and, as a consequence, withholding the vital element from the various organs which are dependent upon it for healthful action.

Fig. 64.

THE MELANCHOLY MAN.

Cheerfulness should be cultivated by every one. It is an antidote for many ills; and a laugh is of immense value, physiologically. It produces an electric effect throughout the whole system. It is felt in no one place particularly, but every nerve, muscle, and fibre is simultaneously titillated with the electric flash from the brain. All who have melancholy friends should try to excite them to laughter. A few hearty laughs will cure the most desperate case of melancholy. It is a Christian duty to look cheerful, and a blessed privilege to laugh. "Away with melancholy."

Conclusion.

Really the only melancholy which we may be excused for indulging, is that which must come over every one in observing the general ill-health with which we are surrounded, by the unfortunate customs and habits which we recklessly observe and blindly pursue. They are so multitudinous, and so impertinently insinuating, that they may be compared to the insects of summer. They creep into a man's hat; they crawl into his boots; they nestle in woman's waistbands, and they conceal themselves in her trailing drapery. They fall into the food we eat, and drop into the liquids we drink. With the greediness of fabled vampires, they suck out the little brain some

people bring into the world with them, leaving a sting that destroys all moral sense. They penetrate not only the tenement basement, but the drawing-rooms of the affluent. They mark the faces of the poor with pock-pits, and cause the rich to hobble about on gold-mounted crutches. Science must find a cure for their sting, and common sense must devise means for their extermination.

CHAPTER III.

PREVENTION OF DISEASE.

"If half the thought and sentiment that are spent on the subject of death, were bestowed on the practical duty of strengthening, lengthening, and ennobling life, we should be more fit to live worthily and die contentedly."—*Harriet Martineau.*

THIS proposition may sound shocking to many, but it is a living truth; and it may be added, that if half the time and money expended by the sick to *recover* health had been timely devoted to the *preservation* of health, life would be a more enjoyable and less expensive luxury. The trite maxim that "An ounce of prevention is worth a pound of cure," applies with greater force, in this connection, than it can in any other. If people would properly consult temperaments in marriage; then, if they would take some thought and pains to prepare themselves to become the healthy parents of healthy children; and then again, if the children of such careful progenitors would take reasonable care of the valuable legacy bequeathed to them, after a few generations, the good people could tip their hats with a sarcastic good-bye to the doctors, use patent nostrums for poisoning troublesome insects, and limit the business of the undertaker to the burial of those who die by accident or old age. A writer in the *Atlantic Magazine* says:—"In our civilized sedentary life, he who would have good health must fight for it. Many people have the insolence to become parents, who have no right to aspire to that dignity; children are born who have no right to exist; and skill preserves many whom Nature is eager to destroy. Civilized man, too, has learned the trick of heading off some of the diseases that used to sweep over whole regions of the earth, and lay low the weakliest tenth of a population. Secondly, while the average duration of human life has been increased, the average tone of human

health has been lowered. Fewer die, but fewer are quite well. Many of us breathe vitiated air, and keep nine-tenths of the body quiescent for twenty-two or twenty-three hours out of every twenty-four. Immense numbers cherish gloomy, depressing opinions, and convert the day, set apart for rest and recreation, into one which aggravates some of the worst tendencies of the week, and counteracts none of them. Half the population of the United States violate the law of nature every time they take sustenance, and the children go, crammed with indigestion, to sit six hours in hot, ill-ventilated, or unventilated school-rooms. Except in a few large towns, the bread and meat are almost universally inferior, or bad; and the only viands that are good, are those which ought not to be eaten at all. At most family tables, after a course of meat, which has the curious properties of being both soft and tough, a profusion of ingenious puddings, pies, cakes, and other abominable trash, disagrees with the young, disgusts the mature, and injures all. From bodies thus imperfectly nourished we demand excessive exertions of all kinds."

The proprietor of an expensive steam-engine would never permit such a "Gump" to take care of it, as he allows to take care of his own delicate physical machinery. He will not employ an engineer who does not fully understand the entire mechanism of the engine. He will employ one who knows when to increase and when to decrease the amount of fuel; when to let off some of the superfluous steam, and when to augment it; when to clean out the ashes and cinders; and when to add a lubricator to all the various parts subject to friction. Well, now, the human system is a thousand times more intricate and delicate in its mechanism than the steam-engine, and yet people all over the world are "running it," who know nothing of its complicated parts—are in absolute ignorance of the functions of many of them; and are entirely incapable of selecting the proper food (fuel) to keep it in first-rate order.

To the ear of an observant, reflective physiologist, it sounds almost like an insult to our Creator to say that Providence has taken this or that young relative or friend from the family of which it is a dearly loved member. An anonymous writer disposes of this fallacy with the following pointed interrogatories and sensible replies:—"Take for example, the young girl bred delicately in a town; shut up in a nursery in her childhood, in a boarding-school

through her youth, never accustomed to air or exercise — two things that the law of God makes essential to health. She marries; her strength is inadequate to meet the demand upon it. Her beauty fades early. 'What a strange Providence that a mother should be taken in the midst of life from her children!' Was it Providence? No! Providence has assigned her three-score and ten years, a term long enough to rear her children, and to see her children's children; but she did not obey the laws on which life depends, and, of course, she lost it.

"A father, too, is cut off in the midst of his days. He is a useful and distinguished citizen, and eminent in his profession. A general buzz rises on every side, of 'What a striking Providence!' This man has been in the habit of studying half the night, of passing his days in his office and the courts, of eating luxurious dinners, and of drinking various wines. He has every day violated the laws on which health depends. Did Providence cut him off? The evil rarely ends here. The diseases of the father are often transmitted; and a feeble mother rarely leaves behind her vigorous children.

"It has been customary in some of our cities for young ladies to walk in thin shoes and delicate stockings in mid-winter. A healthy blooming girl thus dresses in violation of Heaven's laws, pays the penalty—a checked circulation, cold, fever, and death, 'What a sad Providence!' exclaim her friends. Was it Providence, or her own useless and sad folly?

"A beautiful young bride goes night after night to parties made in honor of her marriage. She has a slight sore throat, perhaps, and the weather is inclement; by day her shoulders are loaded with furs, but on these occasions she must wear her neck and arms bare, for who ever heard of a bride in a close evening dress? She is consequently seized with an inflammation of the lungs, and the grave receives her before her bridal days are over. 'What a Providence!' exclaims the world. Alas! Did she not cut the thread of life her own self?

"A girl in the country exposed to our changeful climate, gets a new bonnet instead of getting a flannel garment. A rheumatism is the consequence. Should the girl sit down tranquilly, with the idea that Providence has sent the rheumatism upon her, or should she charge it on her own vanity, and avoid the folly in future? Look, my young friends, at the mass of diseases that are incurred by intemper-

ance in eating and drinking, in study or in business; by neglect of exercise, cleanliness, and pure air; by indiscreet dressing, tight lacing, etc., and all is quietly imputed to Providence! Is there not impiety as well as ignorance in this? Were the physical laws strictly observed from generation to generation, there would be an end to the frightful diseases that cut life short, and a long list of maladies that make life a torment or trial. It is the opinion of those who best understand the physical system, that this wonderful machine, the body, this 'goodly temple, would gradually decay, and men would die as if falling asleep.'"

We should look upon our Heavenly Father as the author of all *good*, and if we will but observe and think a little, we shall discover that nearly all physical suffering and premature death arise from our own follies and ignorance. "How about the loss of our dear baby?" some afflicted mother may inquire: "It surely had committed no physical sin; and I was careful in feeding and clothing it; and scarcely allowed it out of my sight." Ah, woman, you must look farther back for the causes of your infant's early death. They may have been as remote as the violations of the laws of health by its grand-parents, or great grand-parents. They may have originated in your ignorance, or willful non-observance of those laws which govern healthy propagation, and of which I shall shortly speak. Health and longevity great'y depend upon what is termed a good constitution at the outset. Many a baby is conceived with the germ of disease and early death, and it strikes me that the kind hand of Divine Providence has little to do with the removal of such a child. The disease may not be apparent at its birth. It may even have a healthy appearing skin and plump body, while in its blood lurks a poison or taint of disease which needs only the contact of the atmosphere of scarlet fever, measles, or whooping-cough, to develop. Its blood may be possessed of properties which render it susceptible to colds, resulting in croup, diphtheria, inflammation of the brain, or something equally fatal. I have picked open the fairest of rose-buds, and found beneath its delicate leaves, worms that would have prevented it from ever blossoming. I have eaten apples that had the external appearance of soundness, and the rich complexion of perfection, which were rotten at the core. You cannot always conclude that your children are constitutionally healthy because they are fat and fair. Indeed, scrofulous babies are usually remarkable

for clearness of skin and plumpness of body. I shall therefore tell you, in the opening essay of this chapter,

How to Have Healthy Babies.

With some childless people, I am aware, it is a question of chief importance, "How to have babies at all?" All such persons I would refer to Hints to the Childless, in another part of this work. The relevant question to be considered here is, what means are necessary to secure healthy offspring when people are physically capable of healthy reproduction. The human family is not sufficiently interested in it, I know, but the physiologist should, nevertheless, endeavor to improve the physical and moral condition of the human race by calling attention to it. If boys and girls, and men and women were marketable in the civilized world, as they are in some semi-barbarous countries; if they could be sold like horses, cattle, and sheep, the commercial and practical spirit of the age would, irresistibly demand an improvement in the stock of human beings, as it demands, and is busy in securing, an improved stock of domestic animals. Celebrated stock-raisers in Europe and America, and many of our scientific farmers, are superintending with much care in field, stall, and pen, the propagation of fine breeds of cattle, horses, sheep, and pigs, while at home, their offspring are creatures of accident; conceived, in many instances, under circumstances which render them inevitably puny, sickly, and ill-natured, if not constitutionally immoral. Now, certainly, an argument is not necessary here to show that we should devote as much attention to the proper propagation of children as we do to the breeding of calves and colts. I shall, therefore, defer no longer in coming directly to the advice I proposed to give in this essay.

My first proposition embodies the proscription of a certain class. People who are physically infirm should not have children while such infirmities exist, because they are almost certain to transmit them to offspring, and the combined infirmities of each parent (when both are diseased) frequently result in most lamentable consequences to the innocent victims of this indiscretion. In some semi-barbarous countries, diseased and malformed children are destroyed as soon as born, or when the abnormal manifestations appear, and to the little sufferers this seeming inhumanity may be in reality a mercy; but disregard of the true laws of propagation, followed by

such wholesale butchery of the products, would forever keep a people in barbarism, notwithstanding their efforts to preserve only the best specimens of humanity they might find themselves able to produce. It may be hard for the hopelessly incurable to deny themselves the pleasure of becoming parents; but it is questionable if this self-denial brings more suffering to their philoprogenitive nature, than the sickness and early death of offspring inflict upon them, while their enlightened moral and benevolent faculties—if they possess such—must upbraid them for the evil they achieve by bringing into the world, a little, living, conscious being, *susceptible to the keenest suffering, immediately coupled with physical derangements only capable of inflicting pain.* To do such a deed premeditately would require the fiendish attributes of a demon. It is the ignorance of infirm parents which brings into the world such pitiful specimens of humanity; and it is to the credit of the intelligence and benevolence of some hopelessly diseased men and women, that they do not become parents, for the reason, simply, that they do not wish to bring children into the world certain heirs to their own sufferings.

There is, however, a large class, embracing invalids of both sexes, who think themselves hopelessly incurable, when really, under proper treatment, they might be restored to a comfortable degree of health. Physicians of the reformed school of practice often meet these wrecks of the old-school methods, and triumphantly set them on their feet. In some cases these people may not attain firm health, but if they will unite with those of opposite temperament, having perfect health, and have connection for the purpose of offspring only at such times as they feel in the most buoyant physical and spiritual condition, they may be blessed with healthy children, if other necessary rules given in this chapter are observed. The proper combination of temperaments is a very important consideration. If the parents themselves possess perfection of health, and they have coalesced without reference to physical adaptation, the children may be physically as imperfect as they would be, if they were the products of diseased progenitors. In Part Fourth this subject of temperamental adaptation will be presented in such a way as to afford a guide to those contemplating marriage.

The second proposition embraces hints to those who, having health, do not make the most of it in the act of propagation. People claiming entire immunity from disease, have seasons of feeling less vigor-

ous and vivacious than at others, and unfortunately for offspring, coition is sometimes resorted to at such periods, by way of experiment, to see if better feeling may not be induced. If more convenient, a glass of wine, beer, or other stimulant, or a narcotic is taken for the purpose; but if the drug fail, the exhilarating delirium of sexual excitement is sought; and if offspring is produced, it not only receives at the moment of conception the organic impression of the physical derangements leading to the momentary depression of the parent, but probably also, the embryonic formation of vitiated appetite and passion. With people of this class, offspring should not be accidental, and propagation should only be allowed when they are in the enjoyment of their best physical and spiritual moods.

My third proposition possesses something of value to people who are subject to periods of fretfulness; to attacks of melancholy; to fits of violent temper; to quarrelsomeness, etc. Such persons should be made acquainted with the fact that if, while under the influence of any such feelings or passions, or for some time after they have been subdued, the germ of a new being is planted in the womb, it is liable to be marked or influenced by them. The settling up of a matrimonial misunderstanding is, for instance, a most inopportune time to beget offspring, yet the conception of many a child has celebrated the conclusion of a family fracas. It should be understood that it takes time for the system to recover from the effects of bad passions, and that the incoming good feeling, incident to "making-up," does not for some hours erase the impressions produced on the nervous system, the fluids of the body, and the germs inhabiting the procreative organs of either sex. In my first chapter I have spoken of how all the organs and secretions are affected by the various passions of the mind, and that matter need not be repeated here. With people belonging to the class under consideration, offspring should not be accidental, and conception should take place only when both parties have been in good temper, spirit, and health for at least a period of twenty-four or thirty-six hours.

My fourth proposition should be heeded by the woman pregnant and those who are associated with her during this important period. She should avail herself of every means at her command to preserve her physical health unimpaired; and she should avoid all influences calculated to fret, annoy, or distress her. He who is to be the recognized father of her child, should employ every resource within his reach to

preserve tranquillity of mind and vigor of body to this woman, who is freighted with a germ which is developing the soul and body of a new human being. Critical period! How greatly it decides, and, too, how early, whether the earthly existence of the future man or woman shall be happy or miserable.—Shall the fœtus of to-day wish twenty or fifty years hence that it had never been born? The friends of the pregnant woman, and those of all who surround her, should be united to prevent this. She may maintain her physical health by seeking for residence such locations as are proverbially healthful; living and sleeping in well-ventilated rooms; carefully watching diet—eating only those things which seem to agree with stomach and mind; avoiding excessive and irregular eating; exercising daily in the open air without reference to the criticism of Mrs. Grundy on one corner, or the smoking loafer on the other; observing habits of personal cleanliness; and, in brief, by patient, constant watchfulness, doing every thing within her power to promote a feeling of health, and avoiding every thing which in any way produces the contrary effect. Mental tranquillity may be maintained by carefully keeping up the physical health; by association with those who are cheerful and entertaining; by reading books and newspapers of an interesting and elevating character; by doing acts of

Fig. 65.

A CLUSTER OF BABIES.

No. 1 represents poor scrofulous little Job—the offspring of parents who ought not to have had children. No. 2 represents suffering John—the offspring of parents in an unhealthy condition. No. 3 is fretful Peter—the child of fretful, bad tempered parentage. No. 4 is poor Benny—the child of sensuality, liquor, and tobacco. No. 5 is healthy Charley—the fortunate offspring of healthy and intelligent parents.

kindness and benevolence when opportunity offers; by prayerfulness, if a religionist; by communion with God and nature if a moralist; by avoiding jealousy, selfishness, peevishness, and outbursts of temper; by indulging in the passion of hatred toward no one; and by cultivating a love of humanity. The more closely a pregnant woman can observe the foregoing rules, the more nearly she will succeed in giving birth to a being that shall possess at once a healthy, vigorous brain, a happy temper, and a spirit of philanthropy.

There are some general hints to be observed which could not be properly classed under any of the foregoing heads. Conception should not be allowed to take place without a preparatory season of abstinence from sexual indulgence, in order that the procreative systems of both parties may be free from morbid excitability and exhaustion. It should not occur when the muscular system is exhausted by overwork or exercise. It should not happen immediately, or for some time, after eating, when the nervous forces are being largely employed by the digestive organs in doing their work, and consequently refuse to be sufficiently engrossed to perform the function of reproduction as well as the procreative organs are capable of performing the latter function when the stomach is at rest, and can "lend a hand." It should not happen while the mother is already nursing, thereby causing a division of nourishment between two, which is sufficient for one only; for it must be borne in mind that the pregnant mother has to feed the growing unborn babe, as well as the one in the arms. It should be known to the reader that some women conceive during the period of lactation, and that this evil should be guarded against. Nor should it be allowed to occur in less than two or three years after the birth of a child; and in some cases, five years should intervene between the ages of the children, for the mother to sufficiently regain a physical condition capable of imparting health to one in utero-life.

During the period of pregnancy, excessive sexual indulgence unduly develops, in the unborn child, the passion which leads so many young people to a destructive vice. Even amative excitement, on the part of the mother, without indulgence, has a tendency to do this. She should consequently avoid such food and drink as stimulate the amative impulse. When the impulse becomes strong—when the desire is so great as to take possession of the mind, it is then better that it should be gratified, lest the fœtus be marked by this unsatisfied

appetite, thereby producing the very evil sought to be avoided. Sleeping in separate beds may be advisable in some cases, to prevent the tendency to excitement by contact. Association with deformed people, or those having birth-marks, or diseases which cause unnatural manifestations and expressions, should be avoided so far as practicable, to avert the danger of marking the unborn child with any of these peculiarities. Cramped positions in sitting, stooping, bending, and sleeping; falls and contusions; and violent coition in sexual intercourse, should be cautiously avoided, to save the precious little being in the womb from displacement of its limbs, or spinal distortion, which might result in permanent physical deformity; for although remarkably well protected by surrounding membranes, fluids, and the muscular walls of the uterus, the fœtus is sometimes deformed by one or more of these causes.

Lastly, when labor-pains commence and the doctor is called in, do not urge or allow him to hasten a work which old Dame Nature is usually able to do herself, without intervention or aid. If you do, you may injure the child. Especially is this danger imminent if instruments are employed. Women in labor are naturally impatient, and surrounding friends must not be too much in sympathy with this impatience. Physicians are often impelled by the solicitations of those present, to make the period of labor as brief as possible; and it would be well for all to know, that this effort to help matters along not unfrequently results in retarding them, and increasing the sufferings of the patient. It is better to give her moral encouragement; cheer her up; keep up a running conversation, that will divert her from the discomfort of the moment; but keep hands off—at least do not employ them locally to hasten the birth. It is well for her to move about, for by exercise and bodily motion labor may be safely accelerated. In some parts of Mexico, the native women fasten ropes in the beams above their heads, and, taking one in each hand, suspend themselves perpendicularly, and remain in this position until the affair is over. This position is a good one to facilitate the process, and some such arrangement might well be adopted by women generally, for labor is often rendered unnecessarily tardy and painful, by a bad position of the patient, as well as by the drugs and instruments employed to assist.

With this brief caution to women at the critical period of parturition, I will close this essay, and proceed to answer the next question in order.

How to Preserve the Health of Children.

After the baby arrives, the next duty is, to take care of it properly. The nurse, grand-ma, aunt, or some other kind attendant knows how to wash it, and sometimes, not often, how to dress it. Babies are generally dressed too tightly. Their bones are as elastic as cartilage, and their flesh is spongy, in consequence of which the little lumps of humanity give way easily to pressure. The baby clothes which have been so studiously prepared in anticipation of the event, are unconsciously, if not intentionally, pinned or sewed on too closely to allow circulation and physical development to go on naturally. The next error is usually an excess of clothing both by day and by night. Mothers think their babies are such tender little things that they must be warmly clad, hence the flannels, etc., are put on like so many layers of onions. As a consequence the little sufferers wriggle, and twist, and cry all day to get out of them; and kick them off altogether by night, which last act of the triumphant young heroes, gives them a cold.

It is a popular delusion that babies need more clothing than adults, and I am sorry to see that at least one physiologist who has gained considerable reputation as a lecturer, falls into it. He says—"Place a thermometer under the arm of an adult person, and it will run up to ninety-eight degrees: this is the average the world over; under the arms of children or old people it will run up to only ninety degrees or less; therefore children and old people should be dressed warmer than the middle-aged." This looks like a "knock-down argument," at first thought, does it not? But if we look into the animal kingdom below us, we shall find that God does not clothe the inferior animals on any such principle. Sheep, which are full of animal heat, He covers with a thick coating of wool; cattle, horses, and dogs, whose blood is of a little lower temperature, with hair—a covering of less warmth and depth; fish, of a still lower temperature, with scales; and the reptiles, which are coldest of all, with neither wool, hair, nor scales—having nothing but the bare skin itself. Now, in the light of God's example, let us sift this matter a little, and understand it. The child at ninety degrees is in a normal condition; the old man at the same temperature, is in an abnormal state. The child is as God and nature made him; the old man is

where the bad habits of life, and the infirmities of age have placed him. To prematurely raise the temperature of the child, is to violate the law of its nature, and consequently induce disease; to raise the temperature of the old man, is to restore his system to its wonted condition, and consequently to induce the glow of health. In one case, we shall but assist nature in the development of the physical organization by not unduly shutting in or generating animal warmth; in the other we assist nature in carrying on the physical processes, which have become sluggish, by confining and creating, by every possible means, animal warmth. Need I say more in answer to what, at first glance, looks like a plausible argument.

Fig 66.

THE TRIUMPHANT BABY AND SURPRISED MOTHER.

Let me now appeal to the observation of mothers. You know, don't you, that your babies at night *will* kick the clothes off? You tuck them in here, and pin them down there, but when you rub your eyes open at midnight, or near morning, you are surprised to find them nearly or wholly outside of their bed-covering. What can it mean? Now will you tell me what causes you to kick off your bed-clothes sometimes? Do you do it because you are cold? Is it always because you are nervous or fidgety?

How often, an hour or two after you have put your child to bed, you will find by laying your hand on its brow, that it is bathed with

perspiration. Is it necessary that you should give it a sweat? If not, why do you not remove a portion of its covering? The skin should not be wet; it should be scarcely perceptibly moist. If you have night-sweats, you become frightened, and run to the doctor; but you persist in giving your babies night-sweats! By careful observation you may ascertain just how much clothing your child needs, and just how to vary it to suit all atmospheric changes. Nearly always when it wriggles out of, or kicks off clothing, you may rest assured that it is too warmly blanketed. Remove a little of the covering and watch again. If it repeats the same thing, take off still more, and so continue to do until the restlessness of the little creature subsides. You will be surprised, at last, to see how very little covering an infant needs. In rigorous winter, the indigent mother sometimes freezes to death: not so the baby beside her. Who cannot call to mind some illustration of this remark? I think I have fully demonstrated the assertion that babies and children require less clothing than adults; but if any fail to be convinced, let me ask them which they suppose will best conduce to the health of the child—to make it tender by much clothing, so that by getting the clothes off at night, or some other exposure, it inevitably takes cold; or by clothing it sparingly so as to accustom it to cold weather and its changes?

Another important suggestion in regard to clothing is, that it be so distributed to the various parts of the body, that the circulation may not be impaired. In my essay on the clothes we wear, and in some observations in other places on tight-lacing, I have sufficiently cautioned the reader against tight-fitting clothing, and I will not in this place do more than call attention to those remarks; but let me here speak of the great error of dressing the neck, chest, and abdomen warmly, and leaving the limbs scantily covered. I have seen children dressed like Highlanders—with nothing on the limbs at all, while the upper portions of their bodies were clad in flannels. "The dear little things look pretty don't they?" Well, I must confess that they do to those who do not know the physical consequences of such an unequal distribution of raiment. Their plump legs, white or rosy skin, and dimples in the knees are charming; but the exposition of them should only take place when their whole bodies are equally exposed. Everybody knows, or ought to know, that the circulation of the blood in any part is more or less governed by the temperature

of that part. Warm dressing of the feet and limbs, for instance, invites the blood into them; and if they are more warmly dressed than the rest of the body, there will be an undue presence of blood in the extremities. If this habit of dress be reversed, and the upper portions of the body be more warmly clad, then the lungs, liver, stomach, heart and head become congested by the excessive presence of blood, while the extremities are cold, and the circulation in them insufficient. Want of common sense on this point, is a great cause of nervous and blood derangements; and in many cases, the immediate cause of headache, congestion of the lungs, dyspepsia, and constipation among adults, particularly women. I once heard Dr. Dio Lewis very felicitously describe the dress of women before a gymnastic class. I will not attempt to give any portion of his remarks, but some things I have to say here were substantially presented by him. Let us for a moment look at the dress of women especially that worn in winter. An ever-varying head-dress, exposing, during the continuance of one fashion, that part of the head which had been covered by the style of hat and head-dress in vogue immediately previous. Fur collars about the neck, and in many instances fur cloaks enveloping the whole upper portion of the body. Flannels extending from the neck to the waist, with some times many other garments over them, thus producing undue warmth in that part of the body containing the vital machinery, while the limbs are protected only by cotton, or cotton-flannel, at best one thickness of flannel in the shape of drawers, coming a little below the knee, where they meet and lap under white cotton stockings.

Now, with such a costume as this, where does the blood go? Crinoline and a petticoat or two, will not compensate for the furs and other garments about the neck and waist, and the blood will congest those parts which by warm covering are kept at the highest temperature. Hence the complaints:—"Oh, what an awful headache I do have!" "Doctor, what do you suppose is the matter with my stomach?" "I am habitually constipated," etc. It would be well for all women to remember, both in clothing themselves and their children—if they are mothers—the whole body should be equally clad to insure a good circulation. The mere fact that you have lung difficulties will not excuse you for covering your chest with woolen and fur unless you put precisely the same covering on your limbs. For every garment put over the chest, one of equal warmth should

be placed over the limbs, or you will defeat the very object you desire to attain; and mothers, if you will be reckless of your own comfort, health, and life, by obeying the caprice of fashion rather than the laws of hygiene, I pray you heed the hints herein given for taking care of your children; for, possibly, by the time they become men and women, health will become more attractive than dress.

Leaving the criticism of dress, we will next turn our attention to the food of children. It would seem hardly necessary to start out with the remark that babies should not be fed on cow's milk when that from the breast of a healthy mother or nurse can be obtained; but observation proves that mothers are careless—willfully ignorant—or wantonly indifferent in regard to this matter. I would call the attention of all who are interested in it, to the comparison between the milk of the cow and that of the human mother, in the essay on milk, in Chapter II. The breasts of women are nowadays too much cultivated with reference to a pretty form and figure; and while this need not be discouraged, the necessity of developing the mammary glands, with a view to making them productive of nutritious milk when their possessors become mothers, is of far greater importance. It is especially so when young mothers decline to nurse their babies, lest the breasts should become flabby, or otherwise affected in their symmetry. Speaking of women, the Rev. O. B. Frothingham very truly remarked:—"It may be a great thing to be a merchant, a financier, an advocate, judge, writer, or orator, but before these can exist, there must be men; before these can be what they should be, there must be healthy, disciplined men; there must be well-bred youths, carefully instructed, and carefully trained children; *infants lying on deep motherly bosoms, and sucking rich motherly milk.* Yes, more than that, inhaling the pure womanly spirit. It may be a fine thing to have control of their property; to help in making the laws they live under; but to be good mothers of men and women, is the greatest thing in all this world." Many mothers in fashionable life, who are endowed by nature with well-developed organs for nourishing their babies, shirk the responsibility because it is a task—it soils their fine clothes—or what is a still more insulting excuse to the Deity—because suckling their young is doing so much like the inferior animals. To such folly has an undue love of ease, and a false idea of refinement led many women! When, however, such considera-

tions govern mothers, or when an imperfectly developed body has failed to endow the mother with the power to nurse her child, it should not be fed on the milk of cows or goats if a wet-nurse can be obtained, for it is quite unlike human milk in its qualities, as already remarked; and then, too, some discrimination should be used in the selection of a nurse. A cross, ill-natured woman ought not to be employed, because bad temper affects the secretions of the mammary glands, as well as it does other secretions. A scrofulous nurse will not answer, because she not only gives the child scrofulous food from her breasts, but daily bodily contact with her, affects a healthy baby injuriously. Recollect what Dr. Combe said about the atmosphere of a scrofulous person being contagious. A puny, sickly nurse, is also incapable of imparting to a child the nourishment it requires. A nurse must, indeed, be a healthy, temperate, good-natured, kindly woman, with the milk of human-kindness flowing from her soul, and pure, wholesome milk issuing from well-freighted bosoms. When such a nurse cannot be obtained, there is manifestly no nourishment so wholesome for babies as the milk of healthy animals diluted sufficiently to agree with the infant stomach, for all vegetable preparations for babies, have a tendency to cause acidity, and contain particles which the young digestive machinery is not strong enough to dissolve. Meats, and the juices of meats will not answer, as they are too stimulating. They are not, indeed, fit for a child under ten years of age, as the reader will observe in my next essay on dietetics.

In addition to clothing and feeding babies properly, attention must be given to bathing and exercising them. If they are fat and full of animal spirits, they should be sponged every morning with tepid water and a little (very little) castile soap. If lean in flesh, they should be so treated only every alternate morning; but their little bodies should be rubbed down gently with a healthy hand, from head to foot, every day. If the child be absolutely wasted so that marasmus is threatened, it would be better to use a good quality of sweet oil instead of water, and rub them from head to foot with the magnetic hand; after which wipe them down with a dry napkin. This will keep the skin healthfully active and cleanly; and the absorbing pores may be provoked to take up some of the oleaginous matter, and with it assist in inaugurating plumpness. Babies should be carried into the open air daily in all weather, and shaken and

jostled by their nurses. Babies, as much as adults, need muscular exercise to develop the muscular system. They are not strong enough to take that exercise themselves, and it is, therefore, necessary to tumble them about, squeeze their muscles, pat them, and attend to all those little matters which go to promote muscular development. A writer in *Blackwood's Magazine* very sensibly advises nursery tales, rhymes, and other good things. "I would" he says, "say to every parent, especially to every mother, sing to your children; tell them pleasant stories; if in the country, be not careful lest they get a little dirt upon their hands and clothes; earth is very much akin to us all, and children's out-of-doors plays soil them not inwardly. There is in it a kind of consanguinity between all creatures; by it we touch upon the common sympathy of our first substance, and beget a kindness for our poor relations, the brutes. Let children have free, open-air sport, and fear not though they make acquaintance with the pigs, the donkeys, and the chickens; they may form worse friendships with wiser-looking ones. Encourage a familiarity with all that love them. There is a language among them which the world's language obliterates in the elders. It is of more importance that you should make your children loving, than that you should make them wise. Above all things make them loving; and then, parents, if you become old and poor, these will be better than friends that will neglect you. Children brought up lovingly at your knees will never shut their doors upon you, and point where they would have you go."

Babies must also be carefully guarded from all poison, external and internal. Impure vaccination often destroys the health, if not the life of a child. Read what I have said under this head in the chapter on the causes of nervous and blood derangements. Mothers should be careful that their nipples are free from eruptions which might possibly inoculate the baby with their impure secretions. Nurses and other attendants should have clean hands and well-washed calico gowns. Look out for the napkins and towels which are employed about the baby. Carefully exclude from the nursery all poisonous or unwholesome things which the baby can, on floor or in chair, lay hold of. Every thing you know, goes into the mouth of an infant. Painted toys have sometimes caused the most serious consequences in the hands of babies.

Excessive and injudicious dosing is a common cause of ill health

among children. If a child take a slight cold—if it have a little pain in the stomach—if the bowels move a little too frequently—if it have ear-ache—if it be restless and fretful—the doctor is sent for, who, either through ignorance of the injurious effects of unnecessary drugging, or from fear of not pacifying the mother, deals out a little of this, that, and the other thing, to be taken at various hours of the day or night. In the majority of cases children do not need medicating, and a mother more often injures her child by sending for the doctor too soon, than by delaying too long. *External* applications of proper remedies will, in a majority of cases, cure all sorts of baby complaints. I do not exactly want to assume the character of a panacea pedler, but I feel moved to say, in this connection, that if you possess a bottle of my magnetic ointment, such as I speak of in the closing part of my book, a doctor need seldom be called. If a child have a cold, attended with any affection of the throat or lungs, apply the ointment thoroughly to the throat and chest; if wind colic, cramping of the stomach or bowels, loss of appetite, worms, diarrhœa, or the opposite—constipation, apply the ointment to the stomach and bowels for several minutes with the hand. If the child receive a bruise, cut, or burn, the ointment will prove a never-failing remedy. For weakness of the spine, weakness or pain in the limbs, stiff neck, for cold feet, etc., it may be successfully applied to the part affected. It may be effectually applied to the region of the bladder in incontinence of the urine, or other affections of the bladder. In brief, there is hardly an infant ill which the external use of this ointment will not relieve, and generally completely cure; while grown-up children, who have once introduced it as a family medicine, feel that they cannot pass a night without it in the house. Simple hand friction will often relieve the local difficulties of children. Do any thing—do every thing, mother, but administer to the sensitive little stomach a dose of medicine. Soothing syrups are invariably anodynes in their properties, and almost invariably contain morphine or opium. Rather than use them for a nervous or fretful child, I would resort to the ridiculous remedy proposed by a Buffalo Editor. "As soon," he says, "as the squaller awakens, set the child up, propped by pillows if it cannot sit alone; smear its fingers with thick molasses; then put half a dozen feathers into its hands, and the young one will sit and pick the feathers from one hand to another, until it drops asleep. As soon as it awakes—

more molasses and more feathers, and, in the place of nerve astounding yells, there will be silence and enjoyment unspeakable."

One word in regard to the corporal punishment of children, and I will close this essay and enter upon other subjects of equal interest to all who have or are about to have babies, as well as to those who have only themselves to care for. First, do not strike a child on the head. The brain is the great nervous reservoir where all the nerves centre, and a blow here may kill it outright, or make it idiotic. Do not "box its ears," there is danger, by doing so, of rupturing the ear-drum, thereby rendering it deaf, if no greater evil ensue. Do not whip it with stick or lash—such a punishment deranges the action of the capillaries, and the circulation of the blood through them. Do not fill its imagination with hobgoblins, and shut it into a dark room. Kept for moments or hours under the influence of fright, the nervous system is tearfully affected, and made susceptible to attacks of a spasmodic nature. Do not punish it by depriving it of its regular food, for then stomach derangements are inaugurated. All kinds of punishment should be avoided if the child can be controlled by moral influences; but where punishment is necessary, a "good spanking" is the only physical chastisement the body presents a proper place to receive; while those acting upon the fears of the child should be avoided altogether.

Fig. 67.

THE EDITOR'S PLAN FOR DIVERTING THE BABY.

Dietetics for Old and Young.

Little space will be occupied under this head, because the reader may learn from the essay entitled "The Food we Eat," in the second chapter, the author's views on what may be regarded as wholesome food; but I have something important to offer in this place which,

if observed, will have a tendency to build up the physical man, and guard against the insidious approach of disease. Nowadays, children and youth accustom their systems to a stimulating diet, suited only to the sluggish systems of older people, so that when old-age comes upon them, they have nothing to turn to but medicinal tonics to impart to the infirm body and mind strength and vivacity. So long as animal food continues to find a place upon our tables, and stimulating liquids are tolerated by nearly all, and used by a large portion of mankind, the rule should be as follows:—

"Milk for babes," and that only, if possible, which issues from the breasts of healthy mothers. "Mush and milk," for children under six years of age; and during this period all wholesome vegetables may be permitted, but no stronger animal food than milk. Passing the sixth year—butter, eggs, and fish may be allowed to enter sparingly into the diet of the child; and, from the twelfth year—poultry, broths, and the soups of other meats. Not before he is fifteen or twenty should he be permitted to taste of steak, roast beef, or other strong meat. Not before he is twenty-five or thirty, should he allow himself to drink coffee or tea. Not earlier than forty or fifty should beer or other liquors pass his lips. Then, when the infirmities of age begin to creep upon him (and they will come later under this regimen), if it be necessary to resort to stronger stimulants, such inventions as Bourbon whiskey, French brandy, Holland gin, Jamaica rum, etc., may be called to the rescue. But, understand me—I do not advise malt or strong drinks; I merely say so long as animal food and stimulating liquors are used, the foregoing rule is the proper one to be pursued, and now for the reason:—

A child cannot well endure a stimulating diet. His little vital machinery, fresh from the ingenious hands of nature, is full of life, electricity, and animation. At birth his palpitating little heart contracts from 130 to 140 times per minute. At the age of three, his pulse is about ninety, while that of an adult averages seventy-two. Stimulating food, of course, quickens the activity of the vital organs of children, and this morbid activity renders them susceptible to inflammatory diseases. Hence the prevalence of measles, scarlet-fever, canker-rash, chicken-pox, and other ills, hardly known to adults. I really believe that these disorders would never affect children if they were fed and clothed properly, or in such a way as not to derange the activity of their vital machinery as set agoing by good old Dame

Nature. The blood of children is richer in solid constituents, and especially in blood corpuscles, than that of adults, and as animal food tends to increase this richness and solidity to a greater extent than vegetable food, allowing to a child the former, inevitably causes an undue proportion of those constituents to go to the blood, thereby rendering the vascular fluids as ignitable to the breath of contagion, as powder is to the touch of fire. Let intelligent mothers, who set their children's blood on fire with the flesh of animals as food, and then let their doctors kill them in endeavors to quench it with poisonous drugs, hesitate before they add fuel to the flame. Children do not crave meats—they would not eat them if they were not introduced into their toothless mouths while they are in swaddling clothes, while they have not sense enough to reject them, by which means they acquire a taste for this kind of diet. If meats are denied the children, strong drinks will not be craved by the middle-aged; for in a perfectly healthy condition of the human race, meats and strong drinks would not be needed, and the promptings of appetite might be trusted; but now Pandemonium exists in the palates and stomachs of men because they are not started right in babyhood and childhood; and the hydra-headed gourmand looks forth from behind decayed and broken-down teeth, for things totally unsuited to the development of the inner man.

Fig. 68.

A HEALTHY MOTHER AND CHILD.

Fruits are excellent preventives of disease in children and men. The value of apples as food is suggested by Liebig, who says—"The importance of apples as food has not hitherto been sufficiently estimated or understood. Besides contributing a large portion of sugar, mucilage, and other nutritive compounds in the form of food, they contain such a fine combination of vegetable acids, extractive substances, and aromatic principles, with the nutritive matter, as to act powerfully in the capacity of refrigerants, tonics, and antiseptics; and when freely used at the season of ripeness by rural laborers and others, they prevent debility, strengthen digestion, correct the

putrefactive tendencies of nitrogenous food, avert scurvy, and maintain and strengthen the power of productive labor."

Nature has kindly looked to sanitary effects in providing summer fruits. As mankind emerges from the winter season, more or less loaded with carbonaceous dregs which have accumulated under the influence of a keen appetite, and the use of hearty food to warm the body in spite of the cold atmosphere, strawberries, currants, and other acid fruits of a relaxing nature to the bowels are presented for his use; and these dissolve and wash away the effete accumulations of the liver, stomach, and bowels. Lest, however, this process be carried too far, raspberries, with a mild astringency, quickly follow, checking any undue activity of the bowels; and finally when hot weather comes upon us, rendering the system an easy prey to diarrhœa, along come the luscious, dimpled-faced blackberries, with still greater astringent qualities, which have the power even to cure an attack of summer complaint. The provident housewife not only welcomes their advent, and provides them abundantly for the table, but from their rich juices she prepares blackberry syrup for use in all seasons when the little ones are attacked with bowel complaint. Good, loving, kind-hearted, old Dame Nature; and wise, maternally affectionate, and ever-to-be-remembered mother, who receives and properly uses the fruits of her bountiful hand! These remarks of course apply to our latitude where these fruits are raised, but it will be found in all climes that there are fruits of corresponding qualities, whose effects aid nature in keeping up a healthy condition of the system.

Next, a word about fasting. If people would enjoy good health, fasting should only be resorted to in obedience to physiological requirements. While fasting, the solid constituents of the blood decrease rapidly. It is customary even in the Nineteenth Century for our rulers, moved by a mistaken religious sentiment, to appoint days of fasting, which, unhappily, are generally observed exclusively by the very people whose abstemious and religious lives not only render them unnecessary, but whose bloodless condition makes it really a sin for them to fast. Our Creator manifestly never desires us to violate physical law for his worship. It is said that "the monks and the anchorites of old sought to serve God and win an immortal crown, by spending their lives in self-inflicted penances and mortifications, the severity of which seems almost incredible. It is related of them

that they would live for years in cells and caves scooped out of rocks, which were scarcely large enough to turn round in. They would load themselves with heavy crosses and chains; or put collars and bracelets of massive iron about their limbs. They would stand in uncomfortable attitudes until permanently deformed; or look at the sun without winking, until they were blind. They would pass many days without food, many hours without sleep, and many years without speaking. One of the most celebrated of these ascetics, Simon Stylites, lived on the top of a column sixty feet high, for thirty years, exposed alike to the heat of summer and the cold of winter, and at length died without descending!" All of these things look ridiculous to people nowadays, just as the present custom of fasting will ultimately appear to coming generations. There is not a particle of doubt but that fasting would do thousands of people good, but the days appointed for the purpose are only in exceptional cases observed by these; while good and weakly men and women who cannot possibly afford to fast, almost invariably do so, most scrupulously, much to their injury. Fasting, unless called for to counteract the effects of gluttony, also deranges the stomach. This organ must have its due and regular supply of aliment to preserve the digestive machinery unimpaired. Parents should never punish their children by depriving them of their dinner, as is sometimes the practice. A dinner neglected to-day, prepares an unnatural appetite and a weak stomach for to-morrow. A plain dinner in place of the usual family dinner, would answer just as well for a punishment for a child, and physically do him good; and plain living for the glutton would be better than fasting, while regularity in eating is important on fast days as well as on others.

A few remarks on regulating the diet and selecting the food according to the condition of the bowels, and I will close this essay. Many people predisposed to constipation, and others affected in an opposite way, are ever hitting wrongly in their eating. Those who are habitually costive should not eat their meats and vegetables cooked brown; nor such binding food as boiled rice, boiled milk, wheat bread, toast, etc. Such things will do for those who are predisposed to excessive and too frequent movements of the bowels. Nor should the latter eat meats rarely cooked, brown, Graham, and corn bread, hominy, baked beans, or other relaxing articles of food. These are just suited to constipated people. Among fruits—oranges, figs, sour

apples, etc., are well known as relaxing in their properties; while sweet apples, raspberries, blackberries, black currants, and all fruits having a puckering flavor, are binding. Consequently fruits should be selected in their season, suited to the over active or inactive condition of the bowels.

As remarked before, other matters regarding food and diet would be relevant here, were they not treated upon in chapter second; I will therefore leave this subject and invite the reader's attention to

The Physiological Instruction of Children.

In view of the startling wretchedness and vice growing out of physiological ignorance, an essay bearing the above title may properly find place in this chapter. An essay in the second chapter, as well as facts appearing in various pages of this book, exhibit the necessity of proposing some radical course for the proper instruction of children in regard to their bodies, the organs composing their bodies, and the functions of those organs. In our favored country, every district in our cities, and every village in the rural regions, has its school-house. Now, is a knowledge of the alphabet, of spelling, of reading, of writing, of grammar, of arithmetic, of history, of philosophy, etc., more important than a knowledge of anatomy, physiology, and hygiene? Some schools, public and private, have introduced physiological works, which treat in a "gingerly manner" of the human system. They are doing good, but are not just what we want. The most important organs, and those which are most abused, are so delicately alluded to, if spoken of at all, that the student obtains little information regarding them. In our large public schools, academies, and colleges, teachers, male and female, should be appointed to attend to the anatomical, physiological, and hygienic departments, where children and youths should be classed according to age and sex, and instructed, not in the technical, jaw-breaking name of each nerve, muscle, and bone (these may be acquired in a medical college); but in the *uses*, and consequences of the *abuses*, of the various organs of the body, not omitting those most sinned against—the organs of generation. To girls just entering womanhood, lectures should be given on conception and pregnancy, and the duties attending maternity—on every subject, in fact, which prepares them to become the healthy mothers of healthy children, when they shall be ready to assume such responsibility. In smaller village-schools, al-

though as thorough training may not be practicable in this department, a very successful plan may be adopted where but one teacher is employed. A female should be kept in the instructor's chair during the summer, and a male teacher during the winter—a custom not uncommon now in many country places, as a matter of economy. These teachers should be supplied with two sets of plainly written lectures on all the organs, functions, diet, etc., suited to various ages. One set of lectures should be adapted to girls, and the other to boys. In summer, the girls should be classified according to age, and daily, during the boys' recess, the teacher, with such assistance as she might select from the older female pupils, should deliver, in as effective a manner as possible, to the various classes, a lecture appropriate to each. In winter, the male teacher should pursue the same course with the boys, during the recess of the girls. These lectures could be interspersed with such further instruction as the teacher might be qualified to give. A good manikin would be a profitable investment for any school, large or small, with which to illustrate the instructions given in this branch of study. Anatomical plates might also be prepared for school purposes, exhibiting the formation of the sexual organs, or those organs which are the more commonly injured in boyhood and girlhood—those which the Creator has instituted for perpetuating the human family. Some such plan will be carried out in a not far distant future, depend upon it. Let us all try and hasten the day. It is necessary, however, that something be done immediately. Boys and girls are annually destroying themselves or making wrecks of their constitutions, for the want of physiological instruction. Parents must take this matter in hand, until our institutions of learning are complete in this respect. If unwilling to counsel their children themselves, then they should throw in their way books containing the needful information. Almost daily am I receiving letters from young men and women, who commence their epistles with something substantially as follows: "If I had only read your *Medical Common Sense* five years ago, I should have saved myself the necessity of addressing you now." It should be borne in mind that, if children do not obtain physiological information from proper sources, they learn enough to contract vice, through hidden and vitiated channels, and sooner or later the physician is consulted for the relief of diseases which never would have presented themselves, if parents had religiously discharged their whole duty.

Mental and Physical Recreation

Is necessary to the preservation of health. In this busy practical age, both the mental and physical energies are too much concentrated upon money-making. Business men wear themselves out in their counting-rooms, and die just as they are about to reap the golden fruit of their labors, having denied themselves all social and physical enjoyment, with the delusive promise to themselves and their friends, that after a certain end is attained, they will give rest to their overworked faculties. This end reached, another one is substituted, and still another, till the worn-out, cheated brain seeks in the repose of death that rest which its possessor denies it in the whirl of busy life.

The tiller of the soil, who caresses mother earth, and inhales her vital breath, lives longer, but his mental faculties are dwarfed by the monotonous drudgery with which he seeks to obtain the golden bauble, and his overworked muscles shrink, and his shoulders droop with excessive toil. He, too, plants his ambitious stake afar off, moves it onward still farther as he approaches it, and finally reaches it too exhausted to enjoy what he has so long labored to attain.

The wealthy idler too often pursues his avocation of doing nothing with such singleness of purpose as to induce depression of spirits, and thereby enfeeble both mind and body. His imagination becomes tired at grasping empty shadows, and his faculties wear themselves out in striking at nothing.

Many people mistakenly imagine that mental and physical recreation consists in idling away time, while it really consists in doing something all the while, but with such a change of thought and action as to give rest to those powers which are the more constantly employed. There is, for instance, but little recreation in a game of chess for a man who has been employed in the counting-room all day. His play should be out of doors, and his diversions of a character to free the mind from calculation, and give healthy exercise to the enervated muscular system. The farmer may advantageously shorten his days of toil, and spend some hours in every twenty-four in visiting his neighbors, and in the perusal of books and newspapers. The wealthy idler will find happiness and health in industry of some kind, even if it be not remunerative. For the accountant, professional man, or for any one closely engaged in sedentary pur-

suits, there is probably no exercise so beneficial as horseback riding. Much walking exhausts the magnetic forces of the system, if they are deficient, but in riding a horse, the animal does the work, and the rider takes the exercise, and not only does the stomach, liver, and other internal organs get wholesomely jostled, but every muscle of the arms and limbs partakes of the invigorating shaking. Then,

Fig. 69.

MAGNETIC EXERCISE.

too, the horse is a regular battery for the generation of animal electricity. The vapors from his nostrils, and the steam from his body, are loaded with magnetic life. The busy brain-worker, seated upon the saddle, is enveloped in an atmosphere of vital magnetism, which his attenuated body drinks in as the parched earth takes in the even-

ing shower. Dr. Frank Hamilton grew enthusiastic in a lecture, free from exaggeration, when he said:—

"My friend, a well-known and very distinguished doctor of divinity, believes that I also ride a hobby, since I will prescribe no medicine for him but a horse; and I frankly confess that he has good reason for his belief. It is part of the speaker's creed that all religious congregations should build a barn, and buy a horse with a saddle and bridle; all which should be endowed so as to cover every future necessary expense; and that as soon as the horse is properly installed, and not before, they may proceed to install a pastor. This doctrine in which we fully believe, has reference no less to the interest of the church than to the interest of the clergyman. It will secure one original sermon on every Sabbath morning; it will obviate the necessity of assistant chaplains, and save the expense of a voyage to Europe once in five years. It commends itself especially, therefore, to the consideration of poor and feeble congregations.

"The utility of horseback exercise is not limited, however, to clergymen and their congregations. It is, in our humble opinion, the best exercise for both men and women, whether within or without the church—combining, as it does, the largest amount of active and passive motion, with agreeable excitement. The trout may refuse to nibble, and the game to start, but upon the horse there is certain pleasure beyond all contingencies. The rider is above everybody else, he goes faster than anybody else. He has, for the time, a kind of ideal, and not actual being, and rides his horse as a poet rides his Pegasus. At one moment he imagines himself a general at the head of an army; at another, an emperor, making a triumphal entry; now he is a knight, returning from conquest; and now, perhaps, he rushes in battle; or he is riding a fierce race, and he springs in his saddle as if ten thousand bright dollars depended upon the result. Not that he actually believes all this, but only that he feels somewhat as if it were so, or might be so.

"When he presses his spur into the tender flank, and his horse plunges and prances, he also plunges and prances like his horse. He feels as if, in riding him, he was a part of the noble animal himself, and that he is indeed what the Thessalians were reputed to be, half man and half horse—a real Centaur.

"We cannot tell you what a horse will do with that precision and minuteness with which an empiric recounts the diseases which his

hobby will infallibly cure, but we are certain that our hobby will reach a great variety of cases; and we believe, that a horse—one horse a day—is good for almost everybody, if properly administered. Some will require to be cautioned against riding too violently, while for the benefit of others, you must add the directions usually given in the old polypharmic prescription: 'when taken to be well shaken.'"

Although consumption prevails to a serious extent in the British Army, investigation has proved that the cavalry regiments suffer much less than the infantry. There is no other way for accounting for this fact excepting this; while the infantry are exhausted by their weary marches, the cavalry have the exercise and magnetism of horseback riding while performing their military duties. For women of sedentary habits in our civilization, horseback riding is deprived of a good share of its advantages by the cramped position they are obliged to take on the detestable side-saddle. It seems as if every pernicious crotchet entering into the popular sense of propriety, invariably bears the most heavily upon woman. We call her the "weaker vessel," and while we pile upon her shoulders the most unhealthful burdens, we also require her, whether walking or riding, to be trammelled with something that lessens the value of her exercise. If she walks, her limbs are impeded in their motion by cumbersome skirts; and if she rides one limb is put to sleep on the pommel of the sadde and her body placed in an attitude which would naturally nearly face the side her limbs occupy, while she is required to face and address her attendant back of her. The awkwardness of the position is obviated at the sacrifice of a healthful one, as she acquires the grace of twisting her body around in such a way as to appear to be riding in the same direction the horse is going, and to hold conversation on the inconvenient side with the gentleman, who must, to make the exercise respectable for her, ever be present. If Mr. Pantaloons can't go, she must stay at home.

In Peru, and among many people we are in the habit of calling heathen, or semi-barbarian, women ride astride, and it is not impossible for the inventive genius of our civilization to get up a costume both healthful and graceful, which would allow a woman to sit squarely on her horse, and derive that advantage from the exercise which men receive from the same.

For people of sedentary habits who have not the means to keep

horses, or to hire them, dancing and gymnastics afford healthy recreation, if the former be not carried to the extreme of midnight dissipation, and the latter to the point of physical exhaustion. Among the ancient Hebrews, dancing formed a part of their religious ceremonies and even in the Christian church at an early period, "the dance was united with the hymn in Christian festivities." To-day the Shakers

Fig. 70.

A PERUVIAN LADY ON HORSEBACK.

of our own country unite dancing with worship, but among what are popularly denominated orthodox people, dancing is considerably in disrepute, unless conducted in private assemblies, or in the parlors of those whose means enable them to entertain rooms full of their friends on appointed occasions. Dancing ought, for the benefit of all classes, to again become a part of religious worship. Every thing which has a tendency to perfect the physical organization also gives

strength and growth to the spiritual nature, or at least it makes spiritual growth possible. If conducted without excessive eating and drinking—at seasonable hours and in healthful costumes, dancing is an exercise which promotes health of body, and grace of motion. It has been remarked that a young woman fond of dancing. traverses in the course of a single season about 400 miles, while no lady would think of walking that distance in six months. Nor is it simply by the exercise of the muscles, and grace of movement, that benefit is derived. The commingling of the sexes is highly beneficial. In an assemblage of ladies and gentlemen where there is almost constant contact of hand with hand, and interchange of sentiment, there is also an interchange of sexual magnetism, which imparts a daintier glow than paint is capable of giving to the cheek of the maiden or matron, and to those of the "sterner sex" who participate in these festivities, it gives mental and muscular vivacity never derived in association of gentlemen alone. At the opening of dancing *soirées*, the ladies generally begin the festivities with cold, clammy hands and feet, but after a few commands from the prompter of "right and left, all around" their circulation becomes healthful, and the pleasant temperature of the hand is an evidence that the feet too have become warm by exercise and masculine magnetism. God has ordained it, and man-and-woman-kind cannot disregard the law that sexual isolation impairs the physical health, and renders the mind more or less fretful, peculiar, and taciturn. It still further enfeebles the nervous systems of the weak, and inaugurates nervous derangements and mental eccentricities in the strong. It makes man rude and gross; it makes woman weak and capricious. Had not the Almighty intended that women and men should commingle in their work and play, the earth with its flowers and birds would have been given to women, and the moon, with its rocks and arid mountains, would have been the abode of men, and like some of the representatives of the lower order of animal life, each sex would have had within itself the power of reproduction. This would have been a small matter in the hands of the Creator, and easily enough got along with. But enough on this point. If the reader is interested in this partial digression, he may turn to the essay in Chapter Second, on Sexual Starvation.

Dr. Fish, in a work intended to show how consumption may be prevented, remarks as follows:—

"Dancing is the king and queen of in-door exercise. It is suitable for all classes, all ages, both sexes. It is a most elegant and most exhilarating exercise. It is one of the most ancient, and one of the most salutary. I do not speak of it as a dissipation, but as an exhilarating and valuable exercise. Among the exercises it is second to none. It is extremely suitable for the sedentary, for invalids, and for consumptives. I have known one of the worst cases of consumption cured by dancing alone, practised daily for many months. The cure was permanent and complete.

"It is deplorable that dancing, and amusement of nearly all kinds, should have fallen under the ban of the clergy, and should be preached against as sinful. It is doubtful whether the morals of mankind are benefited by forbidding all amusements, and it is most certain that the health of thousands are sacrificed by it. Who are those that sink earliest into consumption among ladies? Allow me to say it is those who take least exercise, and refrain from all amusements;—who at school, at church, at home, are marked as models, whose walk is slow, and whose conversation is always on serious subjects.

"In a few years death does his work, and their long prayed-for heaven is soon obtained. No greater truth was ever uttered, than that—

'Religion never was designed
To make our pleasures less.'

"Neither in its letter or spirit does our happy and blessed religion—the religion of our Lord and Saviour Jesus Christ, to whom be eternal praise and obedience—anywhere forbid pure, rational pleasures and gratification. 'Use the things of this world as not abusing them,' is the injunction of the apostle, and is a complete summary of all the teachings of the Bible upon this subject."

Differing a little from the writer of the foregoing, my own opinion is that what are variously denominated light gymnastics, parlor gymnastics, and by some, musical gymnastics, introduced into this country mainly by Dr. Dio Lewis, of Massachusetts, may be pronounced "the king and queen of in-door exercise."

This system of gymnastics encourages the commingling of the sexes in physical movements, which are so devised as to bring every muscle of the body into exercise. It possesses all the social and magnetic charm of dancing, while the movements more fully and uniformly develop the whole muscular system. Especially is this remark true

when placing light gymnastics in comparison with the modern fashionable style of dancing, which precludes all lively motion of the limbs, or other parts of the body. The gymnastic march brings the sexes together in a frolicking exercise, which gives as much motion to the limbs as the old-fashioned "jig." The ring exercise again unites the sexes in movements and attitudes which bring into play every muscle belonging to our wonderful bodies. With the wooden dumbbells and wands, a series of exercises may be indulged in at home or in the class, which call into play muscles which men or women of sedentary habits hardly know they possess. The "breathing exercises," give ladies, who, from long habit of pernicious dress and short breathing, might imagine their lungs were no larger or deeper than a chicken's crop, some rational idea of their respiratory capacity. In the vocal exercises, the voice receives not only cultivation, but an increase of strength, and these, combined with the breathing exercises, afford an excellent medicine for people of a consumptive diathesis. In the class, all of these movements are made under the inspiration of music, and music itself is better than medicine for many people. "Luther and Milton found the greatest solace in music." "Nothing," said Alfieri, the Italian tragic poet, "so moves my heart, and soul, and intellect, and rouses my very faculties like music; almost all my tragedies have been conceived under the immediate emotion caused by music."

There is one peculiar advantage which light gymnastics possess over dancing so long as the latter remains in disrepute among strict religionists, and that is, they are encouraged and patronized by the clergy, and no one could reasonably object on religious grounds, if they were introduced as a part of the education of children in all the schools, or made a part of the festivities at ministers' donation parties, and social entertainments of all kind, public or private, religious or secular.

Gymnastics originated with the ancient Greeks, who made it a rule to spend not less than two hours each day in physical development. Their children were required to take exercise in a nude state, so as not to encumber the muscles while undergoing motion and development. And here I may say, that one of the peculiar advantages of light gymnastics over dancing is, that in all classes where they are taught, the men are required to dress in loose pants and blouses, and the ladies in loose-waisted and short dresses. Bathing

was religiously attended to by the Greeks of old, and every conceivable plan was devised and practiced to build up and strengthen their physical organization. They despised themselves for any manifestation of physical weakness. The Spartans were the first to require their women to be good gymnasts. They were not allowed to marry till they publicly exhibited their proficiency in this kind of physical exercise. In our day, the Germans seem to have some of the spirit of the ancient Greeks. They give much attention to gymnastics, both light and heavy; but among our American people, the credit is due to Dr. Lewis for having perfected and introduced a system of gymnastics suited to all ages, and to both sexes, and conducted like dancing to the time of inspiring music. Those not familiar with his system, and who may feel interested in looking into it, may find at the book stores an illustrated work, by Dr. L., descriptive of the series of exercises which he recommends for muscular development.

Swimming may be reckoned among the accomplishments which promote physical health. Buoyed up by the water, the limbs are at liberty to move without impediment, and while the arms are moving in such a way as to develop the chest, shoulders, and back, the action of the limbs strengthens their own muscles and those which are remotely connected with them. This exercise is not available to all, nor can it be indulged in in all climates at all seasons, but for those living near rivers, or lakes, or for those who visit the sea-side, it is a recreation in which both sexes, during months of the year when exercise is apt to be neglected, may in-

Fig. 71.

THE SWIMMERS.

dulge to advantage, because it cleanses and invigorates the skin at the same time that it develops every muscle of the body. The art of swimming is so easily acquired, those who make a practice of bathing, should also learn to swim. Many are injured by bathing who would be benefited by swimming. It is never well to creep or step cringingly into the water. The slow movements, the fear, the low temperature of the water, all tend to drive the blood to the head, and the bather, under these circumstances, emerges from the water with chills and disturbed circulation. Not so with the swimmer. He plunges in with the alacrity of the frog; his head is as cool as his body; his motions to keep afloat send the blood frolicking through the veins to the extremities. He comes out of the water with a glow of warmth. A little friction with a towel makes him feel as if he had experienced a new birth. There is no reason why women, as well as men, may not swim. There is no better fun for a party of girls and boys than to put on bathing suits, and imitate the pranks of the finny tribes in the water. I have seen many expert female swimmers. One young woman of my acquaintance, who recently acquired the art, in one briet summer expanded her chest several inches by the exercise, so much, indeed, as to attract the attention of her friends on her return from the sea-side. Her avowed experience was that bathing injured her. Before learning to swim, if she entered the water she came from it cold and shivering, but so soon as she became a swimmer, her aquatic exercises became beneficial, and were no longer attended by the recession of the blood from the extremities.

There are, in addition to equestrian exercises, dancing, gymnastics, and swimming, various other sports which afford mental and physical recreation, such as croquet, billiards, ten-pins, base-ball, parlor and pond skating, etc., all possessing more or less merit; but those should be chiefly encouraged which bring the sexes together, because they are not only more beneficial physically, but also because women are too generally neglected, and too often left at home by fathers, husbands, and brothers, and even lovers, when they drop the cares of business for rest and relaxation. In addition to this consideration, the sexes should fraternize in their sports, in order that men may become more womanly and kindly, and women more manly and reasonable in their characteristics. We are slowly, but I think surely, approaching an age of greater sexual equality, and the race

will be better and happier when it is reached. We have had enough of rough and heartless men, and of debilitated and babyish women. The lawyer and sheriff fatten on the former, and the latter mainly supply the bread and butter wherewith the doctors are fed.

For those who do bodily labor, we need more lecture and reading rooms, more public libraries, etc., and these should be so conducted as to encourage social intercourse between the sexes. Those who cultivate the soil, and live in sparsely settled towns, should devote a share of their incomes, and a reasonable portion of their time, in promoting social gatherings of the towns-folk; in getting up parties for their boys and girls; picnics for young and old; and thus encourage a due share of relaxation from the monotony and care of farm life. If in consequence of paying liberal regard to these diversions, you die older, and possessed of a few acres less, you cannot possibly in the manner suggested squander enough to deprive you of the few feet required for your decent interment.

Modern governments, instituted for the care and advancement of their people, should encourage the devotion of certain reasonable time to recreation, and physical, as well as mental development, like some of the governments of old.

"In both Greece and Rome," remarks a writer, "great public provision was made for the physical training of youth. In the latter country, at the time of the emperors, there were 800 public baths and gymnasiums, whilst, in both, lectures on all useful subjects were freely opened to the people. It may justly be asserted that (although shameful license was permitted, and at times commanded by a Pagan priesthood) the degeneration of the people of those countries cannot, as with us, be attributed mainly to their social recreations and amusements.

"In Great Britain," continues the same writer, "during the time of the Saxon and Norman monarchy the people had many days of relaxation. In these it was required and commanded that the youth of the nation should be exercised in arms suited to their degree, and the peculiar skill in the use of the long bow for which Englishmen were for centuries famous, must be attributed to the early and constant practice in archery which they were ordered to perform. History tells us also that, at the time of Henry VIII., nearly one-half of the year was absorbed in holidays of various kinds. That monarch issued a proclamation in 1536, limiting those occurring in the time

of harvest to three, commanding all wakes to be kept on one appointed day, and prohibiting the observance of feasts for the patrons of churches. As late as 1776, the national public holidays were fifty-eight in number per annum, and there are many living who remember the red-letter days on which the bank and all public offices in England were closed. They amounted to twenty-six or twenty-eight a year, and were not abolished until the third decade of the present century."

Civilization, as it advances, should utilize, and not root out the healthful practices of past generations. We may go to the Pagan nations of old for many lessons the human race would have done well not to have forgotten. It is time that Christianity and Paganism were *married: the spirit of one to the body of the other;* and the offspring of this marriage would be a race that angels would hover over earth and delight to look down upon.

Sleep.

Nearly every one who is not a baby sleeps too little. Babies are in the way, and are dosed with soothing syrups and put to sleep— "the troublesome little things!" But when they grow up, excess of sleep is exchanged for too little. Business, social intercourse, and, in many cases, dissipation, occupy so many of the twenty-four hours, that rest is neglected. Many do not seem to know the value of sleep. They overlook the fact that it is the season of vital recuperation; that while the body is recumbent, the eyes closed, and the faculties at rest, repairs go on which are no less necessary for the duration of life, than for the health of every individual. "Without the proper amount of sleep," says Professor Hubland, "the vital energy is dried up and withered, and we waste away as a tree would, deprived of the sap that nourishes it. The physical effects of sleep are, that it retards all the vital movements, collects the vital power, and restores what has been lost in the course of the day, and separates us from what is useless and pernicious. It is, as it were, a daily crisis, during which all secretions are re-formed in the greatest tranquillity and perfection."

Many medical writers have given their testimony upon this subject, and instead of originating a new essay, it is hardly necessary to do more under this head, than to quote what has already been well-written. Dr. J. C. Jackson remarks:—

"As a habit and fashion with our people, we sleep too little. It is admitted by all those who are competent to speak on the subject, that the people of the United States from day to day, not only do not get sufficient sleep, but they do not get sufficient rest. By the preponderance of the nervous over the vital temperament, they need the recuperating benefits which sleep can afford during each night as it passes. A far better rule would be to get at least eight hours' sleep, and, including sleep, ten hours of recumbent rest. It is a sad mistake that some make, who suppose themselves qualified to speak on the subject, in affirming that persons of a highly wrought, nervous temperament need—as compared with those of a more lymphatic or stolid organization—less sleep. The truth is, that where power is expended with great rapidity, by a constitutional law, it is re-gathered slowly; the reaction, after a while demanding much more time for the gathering up of new force, than the direct effort demands in expending that force.

"Thus, a man of the nervous temperament, after he has established a habit of overdoing, recovers from the effect of such overaction much more slowly than a man of different temperament would, if the balance between his power to do and his power to rest is destroyed. As between the nervous and lymphatic temperaments, therefore, where excess of work is demanded, it will always be seen that, at the close of the day's labor, whether it has been of muscle or thought, the man of nervous temperament, who is tired, finds it difficult to fall asleep, sleeps perturbedly, wakes up excitedly, and is more apt than otherwise to resort to stimulants to place himself in a condition of pleasurable activity. While the man of lymphatic temperament, when tired, falls asleep, sleeps soundly and uninterruptedly, and wakes up in the morning a new man. The facts are against the theory that nervous temperaments recuperate quickly from the fatigues to which their possessors are subjected. Three-fourths of our drunkards are from the ranks of the men of nervous temperament. Almost all opium-eaters in our country—and their name is legion—are persons of the nervous or nervous-sanguine temperaments. Almost all the men in the country who become the victims of narcotic drug-medicine, are of the nervous or nervous-sanguine temperament."

Every medical man of much observation, and every intelligent non-professional man, who has given any attention to the laws of

health, will not hesitate to indorse Dr. Jackson's views, as expressed in the foregoing paragraphs. People of the nervo-sanguine temperament are not so successful at manufacturing, as they are extravagant in expending, the vital forces, and as you would control the prodigality of a money spendthrift by keeping him employed, so you should control the prodigal expender of nervous vitality by keeping him asleep as many hours of the twenty-four as can be done without recourse to pernicious drugs.

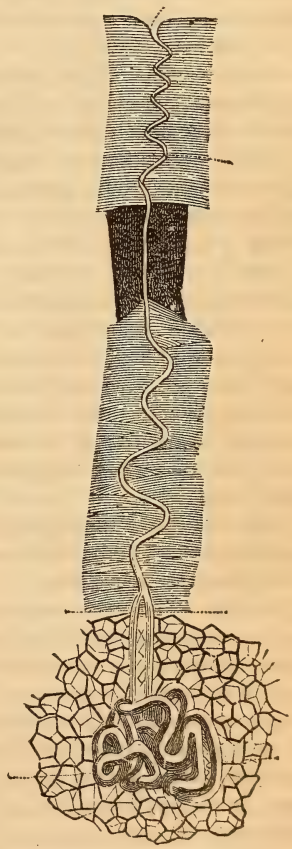
Insanity often results from want of sleep. "The most frequent and immediate cause of insanity," says Dr. Cornell, in the *Educator*, "is want of sleep. Notwithstanding strong hereditary pre-disposition on the part of some people, if they sleep well they will not become insane. No advice is so good, therefore, to those who have recovered from an attack, or those who are in delicate health, as that of securing by all means sound, regular, and refreshing sleep."

Dr. Spicer says: "There is no fact more clearly established in the physiology of man than this: That the brain expends its nerves and itself during the hours of wakefulness, and that these are recuperated during sleep; if the recuperation does not equal its expenditure, the brain withers—this is insanity. Thus it is that in early English history, persons who were condemned to death by being prevented from sleeping, always died raving maniacs; thus it is also, that those who starve to death become insane; the brain is not nourished, and they cannot sleep."

With a little sensible advice, which I quote from Dr. Hall's *Journal of Health*, as to how to go to bed, I will close this essay. "In freezing winter-time," says Dr. Hall, "do it in a hurry, if there is no fire in the room, and there ought not to be unless you are quite an invalid. But if a person is not in good health, it is best to undress by a good fire, warm and dry the feet well, draw on the stockings again, run into a room without a fire, jump into bed, bundle up, with head and ears under cover for a minute or more, until you feel a little warmth; then uncover your head, next draw off your stockings, straighten out, turn over on your right side and go to sleep. If a sense of chilliness comes over you on getting into bed, it will always do you an injury; and its repetition increases the ill effects without having any tendency to 'harden' you. Nature ever abhors violence. We are never shocked into good health. Hard usage makes no garment last longer."

One word more before concluding. It is really quite important that a person should retire on the right side. This position favors the passage of the contents of the stomach into the duodenum, or lower stomach. It is well that what remains in the stomach on going to bed, should be disposed of, and that position which will the best conduce to the digestion and removal of this matter, is the one which should be adopted. By the time the sleeper has become tired of resting on his right side, unless he has taken a late supper, his digestive organs will have been sufficiently relieved to allow him, without disadvantage, to turn upon the left. Sleeping upon the back is a bad habit, because the pressure of the contents of the bowels upon some important arteries, interferes with a free circulation of the blood, resulting in frightful and disagreeable dreams, and nightmare.

Fig. 72.



PERSPIRATORY GLAND AND TUBE.

Cleanliness.

Insomuch as uncleanliness is the parent of epidemics, so is cleanliness a preventive of disease. Many do not know, while others who do, overlook the fact, that the skin is full of little sewers, called pores, through which are emptied out from the blood, five-sevenths of all its impurities. It must be remembered that while the intestines carry off one kind of waste matter, and the bladder and urethra another, there are over *twenty miles* of perspiratory tubes engaged in disposing of effete matter, unless obstructed by neglect; and unclean-

ly accumulations on the skin, are, in a measure, as injurious to the health, as constipation or suppression of the urine. The annexed cut, Fig. 72, represents, magnified, one of the perspiratory glands and tubes. Dr. Wilson has counted 3,528 in a square inch, on the palm of the hand, of these minute but useful organs. When the skin is neglected, these tubes, or pores become literally dammed up, and if nature cannot force a passage through them for disposing of effete matters, her next attempt is to throw them out in the form of pimples, ulcers, or boils. If this effort is not successful, they remain in the circulation, poisoning the blood and making that fluid, which should be the dispenser of health, the fountain of corruption and disease.

Daily bathing is not indispensable to protect the outlets of these little sewers. Many people cannot bathe every day. The friction of the hand over the whole surface of the body, with an occasional bath, will answer in many cases. Comparatively few, however, are injured by an excess of soap and water, and every one who is not advised by his own symptoms, or his physician, not to do so, may use plenty of water without injury by employing that temperature which best promotes subsequent good feeling. The after effect is a good monitor to govern the frequency of bathing, and to direct as to the temperature most conducive to individual health. But while keeping the excretory pores active, it is also necessary to see that the liver and kidneys are performing their offices, for if they are not, the active skin will become the outlet of an undue share of the waste matters of the system, and cause odors to be emitted which are obnoxious to all who value pure air, and especially to those who have sensitive olfactories.

If men and women were careful in eating and drinking, it would be necessary that all the outlets of waste matter should be kept free from obstruction; but when excesses in eating and drinking are the rule, rather than the exception, when the mouth and the stomach are made receptacles of every thing which tickles the palate, whether the system requires it or not, it becomes still more necessary that the various sewers which nature has provided for the emptying out of useless matter, should be kept active and free from every thing that obstructs the performance of their functions. A good breath is greatly dependent upon the healthful activity of the skin, liver, and kidneys. If these are all in working condition, the rubbish of the system passes off freely. If they are not, it goes through a process

of decomposition, and sends its odorous gases through the blood to the lungs, from which they are carried out with the vapors exhaled.

Pure Air.

Little need be said under this caption in addition to what may be found in the essay entitled, "The Atmosphere We Live In;" but the importance of pure air as a preserver of health is so great, that this chapter would be incomplete without at least an allusion to it. "People have often said," remarks a writer in the *Scientific American*, "that no difference can be detected in the analyzation of pure and impure air. This is one of the vulgar errors difficult to dislodge from the ordinary brain. The fact is that the condensed air of a crowded room gives a deposit, which, if allowed to remain a few days, forms a solid, thick, glutinous mass, having a strong odor of animal matter. If examined by the microscope, it is seen to undergo a remarkable change. First of all, it is converted into a vegetable growth, and this is followed by the production of multitudes of animalcules—a decisive proof that it must contain certain organic matter, otherwise it could not nourish organic beings. A writer in Dickens' *Household Words*, in remarking upon this subject, says that this was the result arrived at by Dr. Angus Smith, in his beautiful experiments on the air and water of towns, wherein he showed how the lungs and skin gave out organic matter, which is, in itself, a deadly poison, producing headache, sickness, disease, or epidemic, according to its strength. Why, if a few drops of the liquid matter obtained by the condensation of the air of a foul locality introduced into the vein of a dog, can produce death by the usual phenomena of typhus fever, what incalculable evils must it not produce on those human beings who breathe it again and again, while rendered fouler and less capable of sustaining life with every breath. Such contamination of the air, and consequent hot-bed of fever and epidemic, it is easily within the power of man to remove. Ventilation and cleanliness will do all, so far as the abolition of this evil goes; and ventilation and cleanliness are not miracles to be prayed for, but certain results of common obedience to the laws of God."

Few people take in enough fresh air to keep their systems well supplied with electricity. Thousands of women in our large towns do not venture out of their houses oftener than once a week in cold

weather, and these houses are protected by patent weather-strips, and every possible device for excluding the breath of heaven; and when the dear creatures do summon the courage to face a north or east wind, they so envelop themselves in heavy clothes, furs, and veils, that they can hardly see out. Beneath all this muffling, they breathe over and over again their own exhalations, with scarcely enough fresh air to even partially disinfect them. Of course their verdict is, on re-entering their residences, that it does not agree with them to go out; so they stay in until some necessity compels them to go out again. Professional men cloister themselves in their offices, and work up with hard thinking what little vitality they derive from imperfectly digested food. Business men stick to their counting-rooms with as great pertinacity as the bull-dog hangs to the nose of a stag, and expend their nervous forces in business-planning, and belaboring their brains with long columns of figures. With such practices in vogue, the stone, the brick, the mortar, the double window-sashes, the weather-strips, etc., which are devised by cunning hands to protect us from the storms of winter, and to shelter us from the oppressive heat and dust of summer, form so many barriers between man within and the health-giving element without. With stoves to furnish heat to destroy what little life the confined air originally possessed, he breathes over and over a few hundred cubic feet of air, as if it were an expensive commodity delivered at the door by the conscienceless express companies, instead of the free gift of God which can be had by opening a door or window.

Besides opening our houses for the ingress of pure air, our clothes should not be made of such water-proof material as to exclude it. Besides going out to parks, cleanly streets, and the country for it, an air bath before going to bed, is an excellent promoter of sleep. Dr. Franklin found this so; and many philosophical men and women nowadays take air-baths. An intelligent woman informed me that she could not sleep without spending an hour in a nude state in a well-ventilated room before retiring. This may appear a little inconsistent with Dr. Hall's suggestion as to making haste into bed; but I have no doubt that there are many people who would be benefited by this practice. Such, for instance, as are full of blood and animal caloric; and those who, instead of experiencing a chill, would find simply a sense of coolness creeping over the skin, followed by a reaction immediately after covering up warmly. We breathe through the

pores of the skin as well as by the lungs. These microscopic lungs cannot be safely insulated from the air.

Especially should the sick-room be well ventilated. Not only should the air therein be cautiously changed in inclement seasons, but disinfectants should be freely used. It is not difficult to obtain these, nor are they expensive. A large bowl of water standing in a sick-room will absorb an immense quantity of impure gases. "Few," remarks a writer, "are aware of the valuable antiseptic properties of charcoal in the sick-room, or of its purifying effects in crowded chambers. A dozen pieces, the size of a hazel-nut, placed in a saucer or soup-plate, daily moistened with boiling water, will, in the course of a week, have gathered their own weight in impure air. At the end of the sixth day they should be removed, and the former ones burned, as in cases of disease they have gathered the poisonous exhalations, and are, therefore, no longer without danger." In sickness or health, we cannot afford to do without pure air, and as it comes to us without money and without price, it is one of those God-given blessings which the poor may enjoy as well as the rich. Let us all have plenty of it. Next, let me call the attention of the reader to—

Sunshine.

It is said that if a potato is put into a warm cellar with one small window, the potato will sprout, and that the leading vine will run along the floor of the cellar until it reaches the window, when it will make directly for it, and continue to grow in that direction as long as it can support itself. House-plants instinctively turn their leaves toward the windows, thirsty for sunlight. A running vine planted in a shady locality, seems almost to possess intelligence in creeping around where the rays of the sun may fall upon it. Now, shall not mankind be as wise as the plant, or as sagacious as the potato?

Dr. Moore, the metaphysician, speaking of the necessity of sunlight, says that:—"A tadpole, confined in darkness, would never become a frog; an infant, being deprived of heaven's free light, will grow into a shapeless idiot instead of a beautiful and responsible being. Hence," continues the same writer, "in the deep, dark gorges and ravines of the Swiss Valais, where the direct sunshine never reaches, the hideous prevalence of idiocy startles the traveller. It is a strange melancholy idiocy. Many of the citizens are incapable of articulate

speech. Some are deaf; some are blind; some labor under all these privations; and all are misshapen in every part of the body. I believe there is in all places a marked difference in the healthfulness of houses according to their aspect with regard to the sun, and those are decidedly the most healthful, other things being equal, in which all the rooms are, during some part of the day, fully exposed to the direct light. Epidemics attack inhabitants on the shady side of the street, and totally exempt those on the other; and even in epidemics such as ague, the morbid influence is often thus partial in its labors."

Sunlight not only imparts vital magnetism to the extent of preventing disease, but it has been resorted to with success as a curative agent. One of our journals commenting upon the healing influence of light, remarks that, "Sir James Wylie, late physician to the Emperor of Russia, attentively studied the effects of light as a curative agent in the hospitals of St. Petersburg; and he discovered that the number of patients who were cured in rooms properly lighted, was four times greater than that of those confined in dark rooms. This led to a complete reform in lighting the hospitals of Russia, and with the most beneficial results. In all cities visited by the cholera, it was universally found that the greatest number of deaths took place in narrow streets, and on the sides of those having a northern exposure, where the salutary beams of the sun were excluded. The inhabitants of the southern slopes of mountains are better developed, and more healthy than those who live on the northern sides; while those who dwell in secluded valleys are generally subject to peculiar diseases and deformities.

"The different results above mentioned are due to the agency of light, without a full supply of which, plants and animals maintain but a sickly and feeble existence. Eminent physicians have observed that partially deformed children have been restored by exposure to the sun and the open air. As scrofula is most prevalent among the children of the poor in crowded cities, this is attributed, by many persons, to their living in dark and confined houses—such diseases being most common among those residing in underground tenements."

In scrofulous affections and bodily deformities, Dr. Edwards advised isolation in the open air, and nudity where it would not be incompatible with comfort, as calculated to restore the sufferer. People having a consumptive diathesis, or those having a con-

sumptive ancestry, should pay particular attention, in the choice of a location for a dwelling, to select one which has a southern exposure. Sick people are too apt to be regardless of their surroundings, and depend entirely upon their physician to cure them. A thoughtful man, when he is affected with illness, will seek to discover the cause, and also the influences surrounding him which may aggravate the complaint. On making an investigation, he may not only find that his rooms are not well ventilated; that the location is not free from swampy dampness; but that his dwelling is so situated behind hills, or under so much shade, as to entirely shut him in from the light of the sun. Discovering these disadvantageous conditions, he should at any sacrifice of business or property, if he values health and life, betake himself to some spot where he may secure all of nature's agencies for his recovery.

Occasionally, some one daily exposed to the sun in the heat of summer, gets an over-dose of the curative agent, and has an attack of sun-stroke. All active medicines are injurious taken in over-doses; but sometimes the sun's heat is censured for what bad habits have induced. If a man eats and drinks excessively, or sets his blood on fire with "camphene whiskey," he is more liable than anybody else to have sun-stroke. Some medicines become injurious by mixing, and it could hardly be supposed that the pure sunlight, fresh from God's laboratory, would mix well with the vile drinks of our low groggeries, As, however, the lightnings of heaven sometimes kill innocent people, continuous exposure to a summer's sun may, in some cases, strike down sober, temperate men. To avoid this, those who are compelled to work in the sunlight during the hottest days of the year, would do well to wear a wet napkin or handkerchief on the top of the head, under the hat. The farmer or gardener has something still better in the cabbage leaf, which may be dipped in water and worn in the same way. Actual sun-stroke, however, requires stimulants to be employed, and not bleeding or depleting medicines, as in the treatment of apoplexy. A writer correctly remarks that it "resembles apoplexy in some of its external features, and is often mistaken for it, but in truth is very different; the brain is not congested as in that disease, no effusion of blood or serum on the brain's surface; the patient is pale, cold, and quiet; or, as is often the case, he is convulsed and has tremors like one in delirium tremens, both on approaching and recovering from insensibility—his pulse weak, quick, and frequent, 100 to 160.

On the contrary, in apoplexy he is flushed, heaving, and stertorous, or his breathing is very hard—pulse full, strong, and slow."

Let no one, however, be afraid of sunlight because of occasional cases of sun-stroke. If statistics could be obtained regarding those who die directly or indirectly from want of sunshine, we should find that this class would number a thousand to one who dies of an over-dose. People in the country are apt to bury themselves beneath the foliage of shrubs and trees, and bid defiance to the few rays that do penetrate, by closing the green blinds which shelter the parlor windows. Mechanics and a great many of the business men in cities, are contented to pursue their avocations all day by gas-light. There is said to be an office in Nassau Street, in this city, the window of which is so shut in by its contiguity to another building, that the sunlight never enters it; and that every one who has occupied it for the past ten or fifteen years, died of consumption.

People who break away from their business for summer recreation, and make tours to the watering-places, think that they derive great advantage from change of air. It is true that they do. The qualities of the air are greatly modified and affected by the geological formations beneath the surface, and the vegetable products which present themselves above; so that one cannot breathe the air of any of these locations, without extracting certain properties which the system requires. In this way, change of air frequently proves highly beneficial; but, in many of these cases, benefits are attributed to this cause, when they are more greatly due to exposure to sunlight. When people allow the sun to paint their faces brown, torpid livers are less liable to paint them yellow.

Good Temper,

And, I might also add, a clear conscience, are necessary for the preservation of health; but, in my essay on the "Violation of the Moral Nature," all has been said that need be in regard to the importance of having the conscience free from a sense of self-accusation and remorse. I will, however, say something in this place, about good-temper, and its beneficial effects upon the system. Just exactly to that degree in which men and women are improved by a cheerful, unprejudiced condition of mind, they are physically injured by a morose, bigoted, and selfish habit of thought. Anger, jealousy, envy, distrust, and personal dislikes, all tend to induce nervous diseases.

When the white man hates the Indian; when the Irishman detests the colored man; when the Yankee feels like fighting the "cockney;" when the Hindoo, laboring under prejudice of caste, will not associate with the European; when the Mohammedan regards the Christian as a hog; when a full-blooded African disdains to associate with a mulatto or quadroon; there are certain mental emotions experienced, which contort the features and disturb the harmony of the whole system. The indications of such feeling are at once conveyed to the face, and, to some extent, leave their impress on the facial muscles, giving to the individual habitually indulging therein, a countenance more or less disagreeable. They make themselves felt upon the nervous system, by irritating it, and disturbing the harmonious circulation of the nervous forces. They also impair digestion, and interfere with the healthy action of the liver.

Chronic grumblers are never really well. They cannot be. They keep their sensitive nerves constantly vibrating with discordant emotions; yet grumbling is indulged in by people of all religions and nationalities. The farmer leans over his fence and grumbles about his crops. Showers have been too frequent and the ground is too wet; or a drought is scorching his growing vegetables. The tradesman grumbles because trade is too dull; or, when customers are coming in numerously, he grumbles because of overwork. Even the parson grumbles because his parishioners fail to "come to time" in requiting him for his labors in the pulpit. Grumbling gives the features a pinched, "sour-milk," appearance; vitiates the gastric juices, and dries up the secretions. These effects are only just penalties on the person who allows his temper to be thus disturbed; but his innocent family and friends suffer with him, as they are kept in a perpetual "nettle," and this induces nervous derangements in them. Many a good wife has been worn into her grave by a grumbling husband; and many a good husband has been driven from intimate association with his family by a fault-finding wife. The children in either case, are brought up in a hot-bed of discontent, which makes its impress first on the buoyancy of their young spirits, and then on their nervous systems.

Petulance is worse than grumbling. Many people are like snapping bugs, that cannot be touched without snapping; or like rattlesnakes that cannot be looked at without hissing from their throats and rattling their bones. Such folks are said to be "full of bile;"

but the petulance causes the bilious condition, instead of the latter causing the petulance. Petulance often causes hysteria among women, and hypochondriasis among men. Artemus Ward said, that "G. Washington never slopped over." Petulant men and women are constantly slopping over, and there is no nervous rest or happiness for those who get bespattered with their venomous utterances. Even dogs stand about them with ears and tail down, and with an increased susceptibility to distemper and hydrophobia. Perfect health is incompatible with a petulant disposition, and cannot be maintained by those who are compelled to associate intimately with petulant people.

Violent temper is worse than petulance. It is absolutely dangerous to life as well as to health. I have known people to bring on attacks of hemorrhage by indulging in explosive anger. Such tempestuous emotion causes congestion. At such moments the blood presses the brain, and jumps violently through the delicate machinery of the heart; it unduly fills the arteries and veins of the lungs; it completely arrests digestion, and suspends biliary secretion. All the vital machinery is clogged with the undue presence of the perturbed vascular fluids.

People who have naturally good temper deserve no credit for being habitually good-natured; but those who have a fretful disposition or violent temper, are censurable for indulging in grumbling or rage. There is no work so necessary and ennobling as that of rooting out inherited bad qualities. As soon as they are discovered the work should begin in earnest, nor should it be suspended till they are completely eradicated. If the aspiration for moral perfection is not sufficient to prompt this effort, then selfishness should, for every one desires to have health, and this is not permanently compatible with the indulgence of an irritable or violent temper. Move around good-naturedly. Let your soul shine out as brightly as the sun at noon-day. It will warm yourself within, and all those whom you hold dear without. It will promote harmony of action in your intricate physical machinery, and make all about you happy and more nearly healthy.

Keep the Feet Warm.

Almost every reader of this book is undoubtedly aware of the prevalence of cold feet. You, who are at this moment perusing these pages, may have cold feet, and think this condition of little conse-

quence. You know your neighbor across the way is affected in the same way; and perhaps you know hardly any one who is not subject to cold feet, at least during the winter. The husband often jokes his wife in the presence of friends, "that her feet are like icicles," and the levity which follows shows the entire misapprehension on the part of the popular mind, of the serious character of the impaired circulation which is indicated by this affection. When there is little blood in the extremities, where do you suppose that fluid is? It is certainly confined within the skin somewhere. Perhaps it has not occurred to your mind that the frequent headaches with which you are affected, arise from an undue supply of blood in the head; or, that you have fluttering and palpitation of the heart, from a pressure of the fluid in that organ; or, that the pain in your right side proceeds from the congestion of blood in your liver; or that an affection of your lungs or stomach is caused by a pressure of blood in them. There is really no such thing as computing the number of those who die annually from cold feet, or, what is the same thing, from diseases induced by congestion of some vital part, or parts, at the expense of the feet, which are left without a sufficient supply of blood. Although cold feet do not directly kill the patient, warm feet would cure him, and the invalid dies because this equilibrium in the circulation is not established. Let us look for a moment into the cause of cold feet. It is probably known to most intelligent readers that the healthy action of the heart, and of all the arteries and capillaries, is dependent upon a generous supply of nervous stimulus; and this nervous stimulus, I have already shown to be a kind of animal magnetism or electricity. Whenever, then, the vital forces become deficient in the extremities, there is an insufficiency of nervous stimulus given to them, and the arteries and capillaries become, as an inevitable consequence, sluggish in their action; and this failure of the arteries and capillaries to perform their functions in the extremities, leads to an insufficient supply of blood in the feet, just as a defective pump will give an inadequate supply of water to a country kitchen. The blood may be too thick, or it may be loaded with impurities; still if the arterial and capillary action is sustained by an abundant supply of nervous or magnetic force, the blood keeps moving to the feet, and the toes are made warm by the presence of an abundance of blood. It is true, however, that if the blood is in a diseased state, its circulation to the extremities is retarded, unless nature supplies a suf-

ficiently increased nervous stimulus to off-set this difficulty. This qualification does not in the least affect the accuracy of my first statement as to the cause of cold feet; for it still remains true that the nervous forces must *precede* the blood circulation, and prepare the way for it, and that any means which may be used to supply, divert, or stimulate these forces in the bloodless part will, if followed up with reasonable patience, result in a cure.

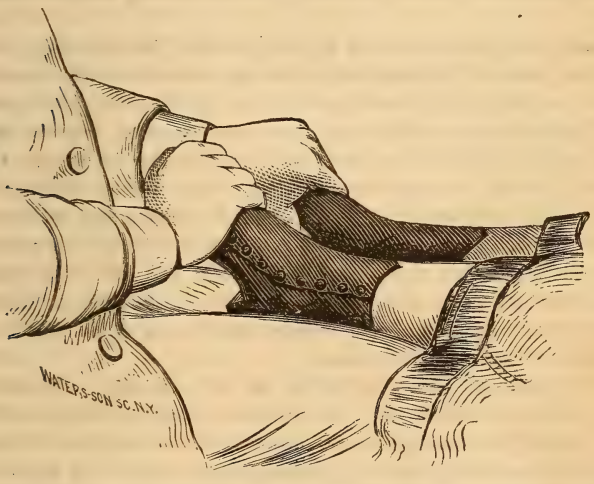
To preserve the warmth of the feet, one of the first things necessary is, to keep them warmly dressed. I have alluded in the essay on "The Clothes we Wear," and also in a preceding essay of this chapter, to the importance of dressing the feet and extremities as warmly as the shoulders and chest are dressed. The next thing to be observed, is to avoid disturbing the harmony and force of nervous action in the arteries and capillaries of the feet by too much *fire* warmth. Holding the feet habitually to the stove, grate, register, or fireplace, will induce cold feet, even in those who are not subject to them, by relaxing the capillaries and arteries, and destroying the harmony of that nervous action which in health is very busy in moving the blood through its natural channels, whether we are wrapped in unconscious slumber, or engaged in the festivities of the dance. Habitually bathing the feet in warm water will also, in time, produce arterial and capillary relaxation in the extremities. Those who occasionally have cold feet, and resort to hot-water foot-baths to cure them, obtain momentary relief, but the difficulty is made worse and worse every time the hot bath is resorted to. If there existed in all cases, constitutional vitality enough, cold-water foot-baths would be excellent treatment for cold feet, as hot water really is for uncomfortably hot feet; for the reaction from cold baths is warmth, and the reaction from hot baths is coldness. In a great many, perhaps in a majority of cases, the vitality is too low to effect a warm reaction when cold is applied; while the less vitality a person has, the more certain are hot water applications to produce a cold reaction. Hence it will be perceived that popular habits are entirely wrong in the management of cold feet.

By this time, some fair reader is mentally inquiring, What am I to do, doctor? I must not put my feet to the fire, nor into warm water, and I cannot go to sleep with cold feet. Now, you will laugh when I tell you; but if you will try it, you will in less than ten days, bless me for the suggestion. It is simply this: Have some kind

friend, for about twenty minutes, or half an hour, every evening, hold your feet in his or her hands as represented in the annexed cut.

The shoes must remain on, and morocco, or other leather, is better than prunella or cloth. Place the feet in the lap of your friend, and have him or her place the hands over them, so that the palms will rest upon the toes and instep, while the thumbs and fingers grasp the soles of the shoes with sufficient firmness to exclude the air from between the hands and the parts of the shoes covered by the hands.

Fig. 75



WARMING THE FEET MAGNETICALLY, AND STIMULATING ARTERIAL AND CAPILLARY ACTIVITY.

In this way preserve the grasp immovably, with a gentle, but not pinching pressure, until the feet become warm, which will not require many minutes. This method is invaluable because it imparts magnetic warmth, which acts as a tonic to the arteries and capillaries; it diverts the nervous circulation to the extremities by that inevitable interchange of animal magnetism which always takes place between two persons when they are in contact; it gives to the feet more permanent warmth than artificial heat, each warming improving the condition of the patient instead of making it worse; and it often vitalizes one who is deficient in nervous vitality, and thereby

improves the general health. The foregoing reasons will suffice, yet still more could be given.

When some other person is available, the husband should not employ the wife, nor the wife the husband, to do this feet-warming, because they are so frequently in contact that there is less difference in their magnetisms than there is between those less familiar, and consequently a less active interchange of magnetic forces during the process. One of the opposite sex is always preferable to one of the same sex, because there is a greater difference between the magnetisms of male and female than usually exists between two of the same sex.

There is still another way of warming the feet, by electricity, which may be pursued by those who have no friends to take sufficient interest in them to admit of their adopting the first method proposed. It is to put on thin-soled slippers, and scuff the feet, without raising them, repeatedly over a woollen carpet, in a room comfortably warm, and to continue the exercise until the feet become burning hot. This should be repeated as often as once or twice a day, and oftener if convenient, until a good circulation is established. This process will not accomplish the object as speedily, nor will it so greatly benefit the general health, as the plan previously advised; but it is incomparably better in every respect than fire warmth, or the immersion of the feet in hot water.

I will add one more suggestion on feet-warming. Those who have plenty of vitality and are nevertheless affected with cold feet, can generally restore active circulation in the extremities by springing out of bed every morning, dashing the feet into cold water for a moment, wiping them dry, returning to bed and remaining there with plenty of covering upon the feet until they become warm. In conclusion, I will say, that I have not patented either of the proposed plans, and consequently there is no expense in making the experiment. Perhaps the cheapness of the treatment is its only objection, as people are apt to undervalue that which costs nothing.

Spring Renovation.

Such are the habits of mankind in those portions of the world called civilized, almost every man, woman, and child emerges from the winter season with a decided susceptibility to what are common-

ly denominated "Spring Disorders." The liver is torpid—the skin is sallow—the head feels heavy—sleep is disturbed—the bowels are either constipated or relaxed—the tongue is furred—the digestion is imperfect—and an overpowering sense of lassitude creeps over the whole muscular system, and so affects the mind as to render it restless or inactive. It is true that lassitude to some extent is the inevitable result of the peculiar properties of the atmosphere of spring. The relaxing air which is supplied by nature for the purpose of swelling and opening the buds of vegetation, is such as to relax and weaken to some degree the muscular fibre, and lessen mental energy; but this condition is greatly aggravated, and the symptoms before named produced, by bad habits in eating and drinking, and by confined air, during a season when the appetite is sharpened by frosty air, and warm, illy-ventilated apartments are sought for refuge from cold. Overloaded stomachs, late entertainments, artificially warmed and vitiated air, poison the blood, lower the stock of nervous vitality, and thus cripple the motive powers which Nature employs in keeping the vital machinery in healthful activity. The advent of spring, consequently, becomes the harvest of the venders of all sorts of panaceas, for these are resorted to by almost everybody. Nature has spread her green carpet over the grim soil, beautified the woodland with foliage, festooned the arbors with vines, and the birds seem happy. Old Sol looks as if indulging in laughter—and the insects creep from the walls and fences to join in the chorus which seems to issue from the countless throats of animate nature, and the sallow-faced lord of creation cannot understand why he too does not feel in the mood to enjoy the exit of winter and the presence of spring. So he takes bitters—not because he knows any thing about their properties—but because something must be done; if not bitters, then cathartics; and he fancies they improve him, for bitters are usually stimulating, and cathartics are liable to give him something of a cleaning out. If these remedies be not the best that could be devised for the purpose, they *appear* to afford some relief, and as they can be obtained about as handily as bread, they are swallowed down, *q. s.*

Most of the bitters with which the country is flooded are simply abominable decoctions, with no medicinal property excepting alcohol. If stimulus were wanted, it would be better by far to purchase and use some good brandy, rum, or gin; and if a bitter is desired, steep and

add a strong decoction of equal parts of hops and chamomile flowers. But in most cases of spring disorders, stimulants of any kind produce only temporary exhilaration, while the blood is thickened and made worse by them. The blood needs cooling and renovating in those who are fleshy, and purifying and enriching in those who are lean. Therefore, bitters are not what nature requires for spring repairs, and the alcoholic property cheats the drinker by making him feel momentary improvement, while the real sources of weakness and discomfort remain undisturbed.

Cathartics usually act locally upon the contents of the stomach and bowels by dissolving them, and quickening peristaltic action, without in the least stirring up healthful activity of the liver and gall-ducts. Consequently, those who resort to simply purgative or cathartic medicines are only improved by the local unburdening of the stomach and bowels, while the blood and inactive liver remain untouched. The result in this case is, no permanent relief, and nature is left, after all, to help herself as best she can.

The course which ought to be pursued by those who find themselves physically out of order in the spring, is to consult some physician in whom they have confidence. Reliance cannot safely be reposed in the thousand and one blood-purifiers and sarsaparillas which stand in solid battalions on the shelves of the apothecary, nor in the anti-bilious pills, or liver pills, which are advertised in the newspapers. The former are little more than colored sweetened water and alcohol, and the latter possess usually no other than purgative properties. Summer sickness may be prevented by spring renovation, but any hap-hazard attempt at the latter may only the more surely prepare the system for the former. If "a stitch in time saves nine," when applied to our garments, it may apply with equal truth and felicity to the body the garments envelop. But all botch-work should be avoided as the least economical in the end.

Other Suggestions

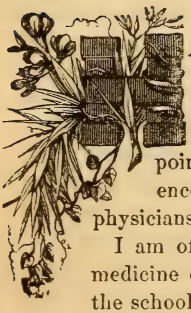
For the prevention of disease may be found in various parts of this volume, and especially in the chapter immediately preceding, to which this is simply a correlative. It would be supererogatory to make this chapter as complete as the subject would require, if the one on the "Causes of Nervous and Blood Derangements" were omitted. Then, again, in matter coming after this, on chronic

maladies, marriage, etc., hints on the prevention of disease will naturally find expression where infirmities growing out of physical or social discord are treated upon.

In taking leave of this chapter, therefore, with its seeming incompleteness, the author takes consolation in the belief that the reader will find somewhere in the pages of this volume, the information which may possibly be sought and not found in the essays herein presented.

CHAPTER IV.

COMMON SENSE REMEDIES.



HAVING glanced at the proximate and many of the remote causes of disease, and made some suggestions for their prevention, next in order is a consideration of appropriate remedies. In pointing out and commenting on these, I expect to encounter the universal denunciation of old-school physicians, and some opposition from the new.

I am often asked the question—"To what school of medicine do you belong?" My reply is—no school, except the school of nature, which I shall christen the *Utilitarian School.* I have been a diligent pupil of all the old masters, and have investigated all systems. I am now a devoted pupil of nature; intuition is my counselor; common sense my pharmacopœia. In other words, I am *independent*—bound by the tenets of no medical association, and consequently prejudiced against no new discovery which can be made subservient to suffering humanity. Whatever I find in earth, air, water, and science, useful as remedial agents, I appropriate, and resort thereto, when occasion demands, without fear of being confronted by a conservative brother who sees merit in nothing which has not the sanction of antiquity

I have wasted much time in the exploration of what is inappropriately termed medical science, but have always found instruction and entertainment in the great book of nature. The literary productions of old-school writers are often interesting and contain much sophistry; nature is refreshing and pregnant with truth.

Hippocrates flourished over eighteen hundred years before the modern science (?) of medicine was founded. He was even unacquainted with the circulation of the blood; yet he was styled the

"father of medicine," and his success in curing disease so excited the superstition of the ancients, that many of them believed he stayed the plague of Athens. Some are born physicians. Hippocrates was. Every man possesses a special talent for something, and he who becomes a doctor, when nature designed him for a reaper, will mow down human beings when he should be cutting wheat.

Redfield, the physiognomist, says that he can tell who are natural physicians by the bones in the face. He describes them as men having an elevation of the arch of the cheek-bone, called the zygomatic arch. He says that one possessing this peculiarity, other things being equal, "is not only inclined to study and practice, but will have a certain instinct for it, which will materially assist his scientific knowledge." "Without this faculty, and its sign, in a superior degree," continues that popular physiognomist, "no person ever attained to skill and eminence in the medical profession, or even made a good nurse. The North American Indians have this sign very large, one of their characteristics being high cheek-bones, and they are equally remarkable for their 'medicine men'—so much so, that some persons consider the name 'Indian Doctor' a sufficient offset for ignorance and presumption." With regard to my natural qualifications, my interested readers will pardon me for saying that, besides possessing the sign Redfield describes, my medical proclivities manifested themselves at an early age. My parents have often reverted to my boyhood, when pill-making, &c., entered conspicuously into the diversions in which I indulged, and facetious neighbors dignified the contents of my juvenile waistcoat with the title of "Doctor."

With these remarks, prefatory and egotistic, I will enter upon the legitimate mission of this chapter, which is to advocate the merits of those classes of remedies which have rendered my practice so eminently successful and popular, and to expose some of the most prevalent medical errors of the day.

Vegetable Medicines.

The trees, shrubs, flowers, and plants, I contend, possess, in a refined form, all the medicinal properties of the mineral kingdom. Their numerous and far-reaching roots span rocks, ramify in various strata of soil, and extract from good old mother earth her hidden medicinal treasures, which are transposed to regions of air, light

and heat, where chemical changes are effected which at once deprive them of their grosser characteristics, and render them far more efficacious and harmless, as antidotes for human infirmities, than they can possibly be made in the laboratory of the most skilful chemist.

It is said that "if a bone be buried just beyond and a little at one side of a root, the latter will turn out of its direct course and go in pursuit of the bone, and when it finds it, it will stop and send out numerous little fibres which, forming a net-work, will envelop the bone; and when all the nourishment has been sucked out of it, the root will again pass on its way, and the temporary fibres thrown out around the bone will gradually disappear."

Fig. 76.

A SPECIMEN OF WHAT CHEMIST NATURE PRODUCES IN HER LABORATORY.

Thus the inflexible relic of a decomposed carcass may be transformed into a beautiful flower! What human chemist can do this? And yet it is trifling, compared with what nature is daily producing in her boundless laboratory. The roots of herbage and trees have the same power to extract the useful properties of minerals, and, in a measure, derive their nourishment from the various ingredients of the soil. An intelligent writer tells us, that "one of the most remarkable properties of plants is the power with which they are endowed of selecting their food. The soil contains various kinds of aliment for vegetation, and the little fibrous roots that fill the ground select from the whole, and suck in through their minute openings just the kind suited to the nature of the plant or tree to which they belong. All plants will not thrive on the same

soil any more than all animals will live on the same kind of food. Grass and grain require a soil that contains an abundance of silica or flint." The soil of Herefordshire, England, is so genial to the oak, that the trees bearing this name are called, in that region, "The weeds of Herefordshire."

It is this power of selecting nutriment which renders plants so various in their medicinal properties. When we reflect that the earth is covered with an endless variety of vegetable products, no two of which possess precisely the same properties, how absurd appears the conduct of those who wander from the vegetable to the mineral world, in search of remedial agents. Even that greatly prized mineral, iron, which enters so extensively into the *materia medica* of modern practitioners, is possessed by vegetables, and may be administered without resorting directly to the mineral kingdom for a supply. A writer remarking upon the influence of iron on vegetables, says: "A curious discovery has recently been made on the chalky shores of France and England. Where there is an absence of iron, vegetation has a seared and blanched appearance. This is entirely removed, it appears, by the application of a solution of sulphate of iron. Haricot beans watered with this substance, acquired an additional weight of sixty per cent; mulberries, peaches, pears, vines, and wheat derive advantages from the same treatment. In the cultivation of clover, wonderful advantages have been gained by the application of the sulphate of iron on soils in which that ingredient is wanting, and in cases where it is desired to produce an early crop." Some herbs produce the properties of iron to such an extent that they are easily detected in them, and these herbs growing on soil where iron ore is found in great abundance, contain it sufficiently to answer all the medicinal purposes of the mineral, and in a form much more suited to the needs of the animal organization than that worked up in the laboratory of the chemist. The vegetable kingdom practically steps in between man and the mineral world, and says—"Do not, O man, eat dirt or the crude indigestible substances that are found therein. I will send my roots deep into the earth, seek out the medicines buried beneath its surface, filter them through my fibres, expose them to the magnetic rays of the ripening sun, and then hand them over to you, deprived of the dregs that would otherwise obstruct the wonderful machinery whereby you move and exist."

I have already alluded to the instinct of plants in searching out

bones, and taking from them the mineral properties they possess. A curious illustration of this is found in the fact, that when the grave of Roger Williams was opened in Providence, some years ago, it was discovered that the roots of an apple-tree had struck into the skull, and following the course of the spine, had branched at the legs, and turned up at the feet! Besides this instinct to search out sustenance, there is evidence that vegetation possesses sensorial power to some degree. There are plants which, when you touch their leaves in the most gentle manner, fall to the ground as if wilted and dead, and then in a few moments after recover their usual appearance. There are flowers which only open when the rays of the morning sun reach out from the east and touch their folded leaves; there are others which are so sensitive to sunlight, they remain closed during its presence, and only display their beauties and fragrance to the stars. The sensorial life of a plant is probably not unlike that of man when in that condition of repose which renders him unconscious intellectually of what is passing about him, and yet fully appreciative of existence and the luxury of rest. All of you have experienced this sleep in your morning naps. The bite of a fly, or the slight prick of a pin causes the flesh to recoil, or the muscular fibre to quiver when you are in this condition. And if you will take pains to observe, you will discover that the breaking of a leaf, or the plucking of a flower, produces to a perceptible degree some such motion in the ordinary plant or tree, while there are specimens of vegetable life which seem absolutely to suffer pain when their foliage is rudely disturbed. It is pleasant, therefore, to believe that that very restful semi-unconsciousness which still allows an appreciation of existence, such as we have in conscious sleep, constitutes the sensorial life of the vegetable world, and confers upon it at least passive enjoyment. And when we find the vegetable world so near us, so in sympathy, if you please, with our existence, so instinctive in seeking and digesting the useful minerals of the soil, so assimilating when taken into our bodies, what folly to excavate the earth for medicine!

Paracelsus was the Adam of the medical world. Through him came sin into the profession. He was the introducer of mineral medicines. He is the prototype of the old school. Read what his biographer says of him:—

"Paracelsus was a man of most dissolute habits and unprincipled character, and his works (opera) are filled with the highest flights

of unintelligible bombastic jargon, unworthy of perusal, but are such as might be expected from one who united in his person the qualities of a *fanatic* and a *drunkard.*"

Gross minds beget gross ideas—demand gross food and gross remedies. They naturally turn from the study of the green trees and beautiful flowers, with which the brown earth is adorned, and whose luxuriant branches point upward to heaven and health. Thus it was with Paracelsus, who, in the fifteenth century, exalted quicksilver, or quack-silver, usually called mercury, to the family of medicines. For this great exploit he earned the name of *Quack.* This epithet was never applied before. His followers like his remedy, but not his name, and have ever since been trying to shift it upon the Botanics, who desire neither the "game" nor "name." But those who know the origin of the term, cannot, with propriety, misapply it.

They may loom up in science as high as they will,
The odor of quack must stick to them still.

The value of mercury as a remedial agent has been ably handled in the *Journal of Medical Reform*, and for the benefit of those whose "one cure-all" is the blue-pill, or other preparation of mercury, I can not do better than copy it in full:—

"If evidence were wanted," says the writer, "to prove the injurious effects of the various preparations of mercury on the organism, we know not where we may look for more decided testimony than is to be found in the admissions of those physicians who have the most extensively employed them in their own practice. The same amount of evidence against any other article of the *materia medica* would have rendered its use a matter of universal reprehension. It would, doubtless, have become obsolete, or, possibly, have been made a penal offence, under all circumstances, to exhibit it.

"That mercury has destroyed more lives than it has saved, and entailed upon the human family a train of disorders, and an amount of suffering past computation or description, no physician who is not wholly wedded to the errors of early education, or a slave to the authority of musty books and the edicts of self-constituted medical tribunals, will venture to deny. The system of medical training in this country—the abject deference which is rendered to the opinions of the graybeards of the profession, the ceaseless iteration in the ears of students of the stale axioms and mouldy dogmas of 'the fathers,'

and the love of mental ease and indolence which characterizes so large a portion of the old-school physicians, explain the reason why so many worthless and destructive remedies are still retained. Said a physician not long since—'We discover first, the pathological condition of our patients, then administer such remedies as *the books* prescribe. If they live, well; if not, they die *secundum artem.*' There spoke a host of allopathic practitioners and professors, who are too submissive, or too lazy, or too stubborn to think, act, and investigate as becomes a free, intelligent being, living in a day of light, improvement, and progress.

"Some people have insensibly learned to regard this metal as indispensable—as possessing such peculiar virtues and adaptability to cure the ailments to which mankind are subject, that the resources of the physician would be fatally restricted if he were deprived of its use. But if in all the range of argument, the experience of the medical world and the history of the Healing Art, one sound, irrefragable reason can be advanced in proof of this supposition, we will cheerfully abandon all further opposition to its employment. And more, if in the animal, mineral, or vegetable kingdom a solitary agent can be found, the use of which has caused, universally, more permanent suffering, or wrought more disastrous consequences to the human frame, we will confess our ignorance, and charge to the account of prejudice or stupidity all the disfavor it has encountered from both friends and foes.

"If, for a long succession of years, the milder as well as the severer forms of disease had not yielded to the influence of harmless remedies, our attack might be considered misdirected and impertinent. But, fortunately, the truth lies in the reverse of this; and it is an insult to the honesty and intelligence of a large class of physicians, both in this country and in Europe, who are combating successfully with every phase and character of physical disorder, without in a single instance subjecting the systems of their patients to the effects of mercury, to tell them and the world that the changes from a state of illness to a condition of health cannot be promoted without its agency, or if at all, not as well, as speedily, or as safely. Opinions and speculations here are valueless. Facts, unanswered and unanswerable, can be and have been brought to support our assertions. It is well known by all who have paid any considerable attention to the history of medicine in the United States, that it is but a few years

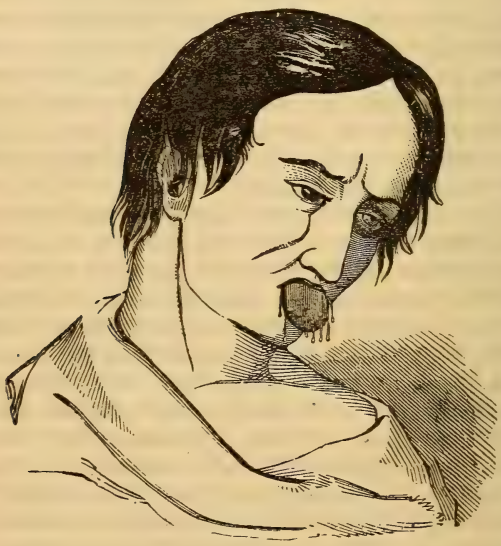
since mercury was the principal remedy depended upon by allopathic physicians for the cure of scarlet fever. If the judgment of the 'Faculty' was to be taken as final, how does it happen at the present day that but few intelligent physicians can be found who ever venture to give it in that disease? If it was indispensable twenty years ago, nothing has occurred in the nature of the disease itself to render it needless and positively hurtful now. A medical journal of the old school, published in this city, told its readers, a few months since, that the unprecedented success of botanic physicians in treating scarlatina, and the great mortality consequent on a course of mercurial treatment, had *forced* 'the Profession' to abandon it altogether. The truth is, our doctors, learned though they may be in the mysteries of the art, are not infallible—they are liable to mistake; and if they have committed one such fatal error, they being judges, in so important a matter as life and health, we may with propriety challenge the correctness of their opinions regarding its necessity and virtue in the cure of other maladies.

"We well recollect, during the early prevalence of an epidemic that visited some of the counties of this State five or six years since, that this 'indispensable' remedy was exhibited without stint or scruple in those cases that came under the charge of allopathic physicians. The proposition that every effect must have a cause, probably set the people to inquiring why it was that a very large majority of the cases so treated terminated fatally, while, with scarcely an exception, those patients who were attended by botanic practitioners recovered. And the inquiry was a very natural and a very proper one. The 'accumulated wisdom of a thousand years' said 'give calomel, and give it again and again;' and it was given; but new graves were dug day after day, notwithstanding. Mercury was *not* indispensable here. It was a withering, blasting scourge to whole families. Death needed no better auxiliary. The contrast in these cases is too important and too significant to be wholly disregarded.

"If a *substitute* for mercury is demanded, we answer, no substitute is wanted,—none required. It is a pernicious poison, that has no legitimate right or claim to a place in the list of MEDICINES adapted to the necessity of a human being; and it was hundreds of years after it stole its way into the *materia medica* before any but the most reckless and empirical ventured to employ it. Agents there are in rich profusion, adapted to the cure of every physical ill—safe,

innocent, and efficacious. God has scattered them with an unsparing hand wherever man suffers, or an antidote is required. In the days of his primitive simplicity—before he had begun to seek out 'many inventions,' or had learned to disregard the instincts of his own nature, man turned to the vegetable kingdom in the hour of sickness; and if we do not mistake the signs of the times, the day is not far distant when he will be brought back to a just appreciation of the wisdom of his original choice."

Fig. 77.



A SALIVATED PATIENT.

Henry Ward Beecher truly remarked in one of his sermons, that "there are medicinal roots in every field which have never been discovered. Many and many a man has been buried within a yard of plants, that, if their healing properties had been known, would have saved his life."

It is difficult to regard the system which Paracelsus introduced, in any other light than a great stumbling-block in the way of progress in the healing art. Had the undivided attention of the medical

profession, for the past three hundred years, been turned in the right channel—had physicians studied more to ascertain the properties of plants, and left the mineral kingdom to the researches of professed mineralogists, what sublime results would reasonably have accrued for the promotion of the skill of the physician and the convalescence of the sick of the present century! Like unto the children of Israel, a large majority of medical professors have been worshipping the metal calf which Paracelsus,—not Aaron,—set up for them, seeing which, the anger of Æsculapius waxed hot against them, and he commanded them to "go in and out from gate to gate throughout the camp," in the language that Moses used to the idolaters of old, "and slay every man his brother and every man his companion, and every man his neighbor." [Exodus xxxii. 27.] How many have been slain since the God of medicine issued this edict, there are not figures enough, Roman or Arabic, to compute.

"The present system of medical education," says a smart newspaper writer, "imparts a knowledge of *books*, and the *precedence* established by certain ancient practitioners; it explores the narrow channel of usage and custom, deferring to names and opinions, but neglects the study of the *natural* remedies by which we are surrounded. In the commonest of our fields, springing unnoticed by the brook-side, and among the pastures, or growing neglected along stone walls, are hundreds of plants possessing valuable medicinal properties, but of which, *not one in forty* of our physicians can tell the name, much less the *use*. And yet nothing can be plainer than the fact that Nature has furnished a remedy for every disease, and that nearly every remedy exists in the vegetable kingdom. Why then is the study of the plants, the roots, and the herbs of the field, the forest, and the mountain-side neglected in the education of those who are styled doctors? Is the acquisition of Latin terms and a general reliance upon mercury and the knife deemed to be more important or safe?"

Now and then an old-school physician is encountered who voluntarily confesses the results of his medical experience and research. Prof. Magendie, of Paris, is reported to have addressed the students of his class in the allopathic college of that city in the following language:—

"Gentlemen: Medicine is a great humbug. I know it is called a science—science indeed! It is nothing like science. Doctors are

mere empirics when they are not charlatans. We are as ignorant as men can be. Who knows any thing in the world about medicine? Gentlemen, you have done me the honor to come here to attend my lectures, and I must tell you frankly now, in the beginning, that I know nothing in the world about medicine, and I don't know anybody who does know any thing about it. Don't think for a moment that I haven't read the bills advertising the course of lectures at the Medical School. I know that this man teaches anatomy, that man teaches pathology, another man teaches physiology, such a-one therapeutics, such another materia medica—*Eh bien! et après?* What's known about all that? Why, gentlemen, at the school of Montpelier (God knows it was famous enough in its day!), they discarded the study of anatomy, and taught nothing but the dispensatory; and the doctors educated there knew just as much and were quite as successful as any others. I repeat it, nobody knows any thing about medicine. True enough we are gathering facts every day. We can produce typhus fever, for example, by injecting a certain substance into the veins of a dog—that's something; we can alleviate diabetes, and, I see distinctly, we are fast approaching the day when phthisis can be cured as easily as any disease.

"We are collecting facts in the right spirit, and I dare say in a century or so the accumulation of facts may enable our successors to form a medical science; but I repeat it to you, there is no such thing now as a medical science. Who can tell me how to cure the headache? or the gout? or disease of the heart? Nobody! Oh! you tell me, doctors cure people. I grant you, people are cured. But how are they cured? Gentlemen, nature does a great deal; imagination does a great deal. Doctors do . . . devilish little . . . when they don't do harm. Let me tell you, gentlemen, what I did when I was the head physician at Hotel Dieu. Some three or four thousand patients passed through my hands every year. I divided the patients into two classes: with one I followed the dispensatory, and gave them the usual medicines without having the least idea why or wherefore; to the other I gave bread pills and colored water, without, of course, letting them know any thing about it . . . and occasionally, gentlemen, I would create a third division, to whom I gave nothing whatever. These last would fret a good deal, they would feel they were neglected (sick people always feel they are neglected, unless they are well drugged), ... (*les imbéciles!*) and they would irritate them-

selves until they got really sick, but nature invariably came to the rescue, and all the persons in the third class got well. There was a little mortality among those who received but bread pills and colored water, and the mortality was greatest among those who were carefully drugged according to the dispensatory."

Now, this is talking right out. Here we have the experience and consequent inferences of an eminent allopathist. What do his brother professors think of it? We shall not probably know what they think, for few of them are so candid as this one. When it is borne in mind that the curability of any disease is determined in each school of practice by the results of its labors, there is one point particularly noteworthy in Prof. Magendie's address. He asks—"Who can tell me how to cure the headache? or the gout? or disease of the heart?" and then replies—"nobody." This conclusion, as well as that of any other of his brother professors, that consumption is incurable, is manifestly drawn from the results of the allopathic practice. It is not strange, then, that he pronounces the diseases mentioned incurable, for it is contrary to the rules of allopathy to acknowledge any skill outside of its bigoted ranks. Did its members not willfully shut their eyes to the astonishing cures effected of these very diseases, by those who have entered a more comprehensive field of medicine, they would not give utterance to such truthless assertions. If Prof. Magendie will regale himself for one season in New York, and spend his leisure moments in my office, I will convince him, by the palpable results of my practice, that the diseases he enumerates can be cured.

The closing portion of his address, concerning his experiment with dispensatory medicines, bread pills, colored water, etc., is also suggestive. He says there was the greatest mortality among those who took his drugs; a little among those who used the colored water, and that those to whom he gave nothing got well. This result is just what any man of a particle of common sense would have expected. His mineral drugging, as a matter of course, only added another load to nature, already burdened with disease; and colored water was not nutritive, but, on the contrary, poisonous, as almost all dye-stuffs are. The presence of this in a weak stomach could not fail to have something of an injurious effect.

There are certainly hopes of the reclamation of this professor. He may yet learn that all the sick man needs is simple nourishment

adapted to the nature of his system and disease, such as can always be found in the forests and fields, and the electrical or magnetic elements which surround him. All enfeebled nature wants is a little mild assistance, and if (to use the language of tree-climbing boys) you attempt to "boost" too fast, you are sure to upset her. The brute creation is more enlightened to-day in medicine than the allopathic profession. When the horse feels unwell, he eats dock and other herbs, if he can get them, and recovers. The cat, subject to fits, eats catnip and dispels the disease. If any of my readers have a sick cat, just give her some catnip herb, and observe the delight which she manifests in rolling on it, snuffing its aroma, and finally eating it. Naturalists say that the fox, rabbit, and many other animals, keep themselves from madness by the use of the medicinal plants with which their wild abodes are surrounded; and it is related of the grizzly bear of California, that, when he gets wounded, he gathers leaves from the bush called "grease-wood," and forces them tightly into the wound. If the animal had the intelligence (or rather the want of it) to call on an allopathic physician, he would probably get a *mercurial plaster!*

Botanic physicians deserve censure for not being more particular in obtaining *good* herbs and roots. They have often earned an unfavorable reputation by their remissness, when fame would have otherwise been their reward. Herbs and roots gathered in the wrong season of the year are worthless. Two-thirds of those sold in botanic stores are, on this account, but little better than chips. Then, too, medicinal plants should always be raised and gathered on their native soil. Fishbough very correctly says, that "the vegetation indigenous to any particular clime or locality always bears a relation to the temperature, soil, and moisture prevalent in that locality. The mountains of tropical regions, which rise from a realm of perpetual summer to an altitude of eternal snow, are clothed at their different elevations by different genera and species of plants, adapted to all the gradations of temperature, from the tropic to the arctic. An artificial transplantation of any of these vegetable forms is either fatal to the latter, or else causes in it a gradual change of constitution until it is fully adapted to its new condition." This change in constitution is a virtual change in medicinal properties. Those who cultivate, either by transplantation, or sowing seed, any medicinal plant, in a soil not natural to it, fail to obtain the plant with its full

and native properties. Consequently, all who raise in a garden, herbs, &c., of every variety, for the market, contribute in a degree to the ill success of those physicians who purchase them. As stated in a preceding chapter, one great secret of my success is, that I gather myself, or by agents so far as practicable, the vegetable remedies I employ, and pay liberally enough for those I am compelled to purchase, to obtain such as possess their native virtues.

Therapeutic Electricity.

Science has heaped wealth in the lap of Commerce—to the healing art she has been a meagre patron. The commercial man cordially receives her magnificent contributions; the medical devotee looks with jealous eye upon her beneficent discoveries. The swift gliding locomotive whistles by the storehouses of the merchant and the luxuriant fields of the planter; calomel hobbles along on crutches, slow as the old post-coach, before the doors of old-school practitioners. A few bold spirits have preferred professional martyrdom to old-fogy despotism. To such the public is indebted for what little advancement has been made in the healing art in this country. Here a physician is not considered orthodox who does not keep a straight coat-tail behind him. To look to the right or left for new agents to relieve the sufferings of mankind, discloses professional heresy punishable with wry faces and shrugged shoulders. Happily for suffering humanity, our transatlantic neighbors have been more tolerant, and given to investigation. Hence it is that the therapeutic value of the electrical discoveries of Galvani, Faraday, Cross, and others, have been tested in the universities and hospitals in England, France, and Germany.

Galvanism, electro-magnetism, and other forms of electricity, are now extensively employed in the best institutions of the old world, and, according to the testimony of Faraday, Golding Bird, Donnovan, Le Roy d'Eliolle, Cross, Palaprat, Smee, Matteucci, and other distinguished medical writers, with the most flattering results.

If my theory, as given in chapter first, is correct, regarding the important part which electricity performs in the animal economy, it does not require facts or arguments to prove the value of electricity as an auxiliary agent in the treatment of disease. The fact is rendered self-evident. It will be remembered that I there assume and

give facts to prove that the same agent (electricity), which the Almighty employs to move and regulate the sublime planetary world, is used by the mind to move the feet, arms, limbs, and perform the various functions of the animal mechanism.

The only plausible objection to this theory, which I have observed, is given by Dr. Ure, who says that *electricity* will pass through nerves which are almost severed and divided, and produce contractions in the muscles over which they are distributed, while the *nervous forces* will cease to pass through and perform any muscular motion when the nerves are thus lacerated.

To one who has failed to discover the almost omnipotent power and instinctive wisdom of the mind, this objection would appear decisive. But my reply is, that *animal electricity is controlled by the mind to which it belongs, while chemical or other electricity is controlled by the will of the operator who employs it.* In other words, animal electricity is governed in its distribution through the system by the intelligent mind whose seat is in the brain, and who *voluntarily withdraws it from any nerve which may be disabled, lest the severed or divided nerve be entirely destroyed by the continued performance of its legitimate function while in this sorely lacerated condition.* The mind constitutes what is called the *vis medicatrix naturæ*, or healing power in any animate body, by which, when diseased, the system is assisted to recover. It is the "family doctor" of the organs, over which it presides. Consequently, notwithstanding the mind has not the power to resist electricity artificially applied to any disabled nerve, by an operator, it can and *does* control its *own* electricity, and will not allow it to traverse a wounded nerve. Nor can this peculiar power of the mind be overcome by the *will* in such a case, any more than the will can arrest the action of the involuntary organs, which are under the control of the immortal principle or mind of the individual; and who can stop the pulsations of the heart by an effort of the will?

The perfect control which the mind has over its own electrical agent is again exhibited when business or family troubles or bereavements overtake an individual. The brain, stimulated to painful activity, consumes more than its due proportion of the nervo-electric fluid, and the mind withdraws enough from the stomach and vital organs to supply the demands of its most important dependent. In consequence of this physiological "panic," the heart, liver, stomach,

etc. (corresponding to the merchants), fail, and the brain (bank) takes care of itself. In diseases induced by mental depression, we therefore find electricity valuable as an assistant, although, in consequence of the blood derangements entailed thereby, insufficient unless supported by nutritive and purifying vegetable remedies.

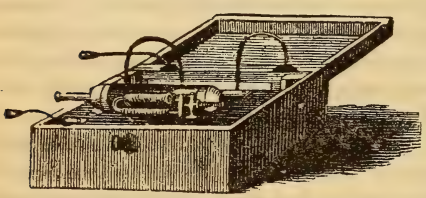
It is the interruption or partial withdrawal of the nervo-electric circulation, which causes what we term "nervous diseases;" and there are more affections of this character than were ever dreamed of in the allopathic philosophy. There is often an inharmonious action of the nervous forces in lung, liver, heart, and kidney diseases. All these organs perform their appropriate offices under the stimulus of electricity. For instance—the lungs are not expanded and contracted by the inhalation and exhalation of air, but the diaphragm is thrown downward, and the air vesicles opened by the nervo-electric forces acting on the muscles controlling the former, and on the little muscular fibres and tissues composing the latter. By this electric movement, air of necessity rushes in to fill the vacuum; when the same forces contract them, exhalation necessarily follows. In diseased lungs and shortness of breath, there is frequently an interruption of the nervo-electric circulation, and hence the necessity of electrical remedies of some sort, in addition to internal medical treatment, in the cure of many cases of pulmonary disease.

The same remark holds good in respect to many disorders of all the vital organs. In dyspepsia, the interruption of a free passage of nervo-electricity through the pneumo-gastric nerve leading to the stomach is not unfrequently the principal cause. Cut the pneumo-gastric nerve in the neck of any animal, and the process of digestion ceases at once—apply the galvanic battery to the end leading to the stomach, and it is immediately resumed. The further this subject is investigated, the clearer the reader will see the value of electricity in the treatment of disease. "Water," it has been beautifully remarked, "is valuable as a medical agent, but its efficiency consists, not in the element itself, but in its subservience as a handmaid of electricity. Electricity is the queen of medicine: water merely a pool in which she bathes her feet." The author of this quotation is, however, a little sanguine, and makes electricity the queen instead of duchess.

Golding Bird, who has devoted much time to the investigation and application of electricity, says: "Conscientiously convinced that the

agent in question is a no less energetic than valuable remedy in the treatment of disease, I feel most anxious to press its employment upon the practical physician, and to urge him to have recourse to it as a rational but fallible remedy, and not to *regard it as one either expected or capable of effecting impossibilities.*" The same writer adds, that "electricity has been by no means fairly treated as a therapeutic agent, for it has either been exclusively referred to when all other remedies have failed,—in fact, often exclusively, or nearly so, in hopeless cases,—or its administration has been carelessly directed, and the mandate, 'Let the patient be electrified,' merely given without reference to the manner, form, or mode of the remedy being for once taken into consideration." In this country there are hundreds of good mechanics who make various electro-magnetic machines, and sell them for family use, with a circular or pamphlet professing to give unerring directions for their use in different diseases. As a rule, having a few honorable exceptions, they are ridiculously incorrect. But few of them, that have ever come under my eye, can be safely relied upon. They abound in errors which would be laughable were it not for the reflection that they mislead the "drowning man catching at straws." It is a serious matter to trifle with a man who has lost health, and perhaps all hope of recovery.

Fig. 78.



AN ORDINARY ELECTRO-MAGNETIC MACHINE.

Think not from these remarks that it is an easy matter to give correct directions for popular use. So much depends upon the constitutional peculiarities of the patient, the complications which exist, and a correct knowledge of the disease or diseases, no such chart can be safely put into the hands of those who do not make pathology, anatomy, physiology, and electrical therapeutics a study. Much must necessarily depend upon the diagnostic skill of the operator, and his judgment in making the application. Each complication which the patient has, must be duly considered in its relation to the others. Constitutional causes must also be duly considered. The proper course for a physician to pursue, who wishes to obtain proficiency as an elec-

trical operator, is to place himself under the *personal* tuition of a competent electrician, and during his pupilage witness all important operations, just as he who wishes to become a good surgeon, attends the cliniques, and witnesses the dexterity exhibited by his instructor in the use of the knife. An invalid who wishes to employ electricity without submitting to the experienced operator, should obtain, from an intelligent source, special directions for his individual case.

Guided by the directions which are furnished by mechanical electricians, isolated cases do occur wherein remarkably successful results are realized. "Accidents will happen in the best of families;" and, inasmuch as electricity possesses peculiar curative powers, now and then one who knows nothing of the science of electricity; knows nothing of the peculiar structure of the human organism; a mere novice in the art of detecting the nature and extent of a disease, will stumble into success. Many more not only fail to derive benefit, but injure themselves by random experimenting. Fatal results may not be as likely to follow as if the same persons had plied themselves with blue-pills and other allopathic inventions, for the reason that lightning in any form is a safer agent to deal with. It is related of Ben Johnson, a revolutionary soldier, of Milford, Mass., that he was struck with lightning several years ago, and remained insensible for two days, when two doctors were called, who said he would die; but just at that moment his power of speech returned, and he ejaculated: "I have stood cannon, musket-balls, and bayonets, and I can stand thunder and lightning if the doctors will only let me alone." The old man recovered. Now no one supposes that such an overwhelming dose of mercury would have ever let the veteran soldier speak again. It takes a vast amount of electricity, even in the form of a bolt of lightning to kill any one. Hence the seeming impunity with which electro-magnetic machines are employed by persons who do not know the negative pole of the instrument from the positive, and who are much less acquainted with the nature of the various currents which may be employed.

The reputation of electricity has suffered by its bungling application in the hands of inexperienced operators. As the effect must depend upon the form and mode of application, it is obvious that no one should apply it without definite instructions, unless he is acquainted with the science of therapeutic electricity and has some knowledge of anatomy and pathology.

I have observed with regret the infatuation some men exhibit after witnessing its beneficial effects in one or two cases. Having cured themselves or perhaps a neighbor with electricity, the conceit at once overcomes them that they are *natural* physicians, and that that agent alone is capable of healing every ill that flesh is heir to, while perhaps they are "natural ninnies," tampering with the sublime phenomena of an omnipotent and mysterious element.

Such operators, unschooled in physiology and the science of *materia medica*, have done much mischief with electrical machines, often applying them when there was no occasion, and with a power too intense for even a person in health to endure. Some parts of the human system are more sensitive than others, and while a powerful current is necessary to affect some organs, a weak and almost imperceptible one is required to have a beneficial effect on others. But the most contemptible men are those who, taking advantage of the reputation electricity enjoys, set up regular "Peter Funk" establishments, from which they advertise to cure every disease that flesh is heir to by an operation or two. While skillful electricians are, by their good works, imparting faith in the therapeutic power of electricity, these despicable charlatans are imposing on the confidence thus created, by humbugging unfortunate invalids who happen to fall into their meshes. Deluded by their promises, and disappointed by their failures, the sick man becomes discouraged, and the popularity of electricity at once drops in the estimation of not only himself, but in that of his friends who have been watching with anxiety the result of the treatment. Every *good* thing has its counterfeit (any thing valueless has not), and swindlers are ever ready to avail themselves of a valuable discovery and prostitute it for selfish purposes. It speaks well for this "hobby" that it can carry so many mountebanks and still survive the laceration of their mercenary spurs.

Cleveland, in treating on galvanism as a remedial agent, very sensibly remarks:—"In making use of galvanism as a therapeutic agent, it should not be relied on to the exclusion of every other treatment; neither should a cure of the disease for which it is applied, be anticipated in a miraculously short space of time. Disease in any organ produces a change in the condition of the organ diseased, and time must be allowed for the process of absorption and deposition necessary to bring the organ back to its normal con-

dition. Galvanism, when properly applied, will be found of great advantage in hastening these processes; yet it will not do to apply it with such power as to destroy the organ from which we wish to remove the abnormal accumulations, or even to carry the action of that organ beyond the condition of *health*."

In this connection I would say that *shocks* are not only unnecessary but are often injurious in treating diseases. I have never found it necessary, with the beautiful machine I have had constructed for therapeutic purposes, to administer shocks, except in obstinate cases of paralysis of both nerves of motion and sensation, and in these cases the nerves of sensation are not sufficiently active to allow the patient to suffer any pain or discomfort from them. The most delicate and sensitive females who have submitted to my electrical manipulations, have, from the first operation, considered the influence agreeable rather than otherwise; and many of my patients have continued their use longer than was actually necessary, because the sensations, during the operation, were not only exceedingly agreeable, but the after effects inspiring and invigorating. As regards making electricity in any form a "one-cure-all," Cleveland is eminently right. I meet with very few diseases that can be cured by electricity, galvanism, or electro-magnetism, alone. Nervous affections almost invariably inflict an injury upon the vital organs and blood, which is not removed by the correction of the nervous harmony merely. Here recourse must be had to mild medication. In mercurial diseases, it will not answer to merely cleanse the system of the offending mineral by the electrical process, particularly if the mercury has been many years in the system. It is, of course, of paramount importance to remove this corroding *cause*, but, having done this, effects, which have become diseases in themselves, remain, and must be disposed of. Here, too, mild, nutritious, and blood-toning medicines, must be given in connection with electricity.

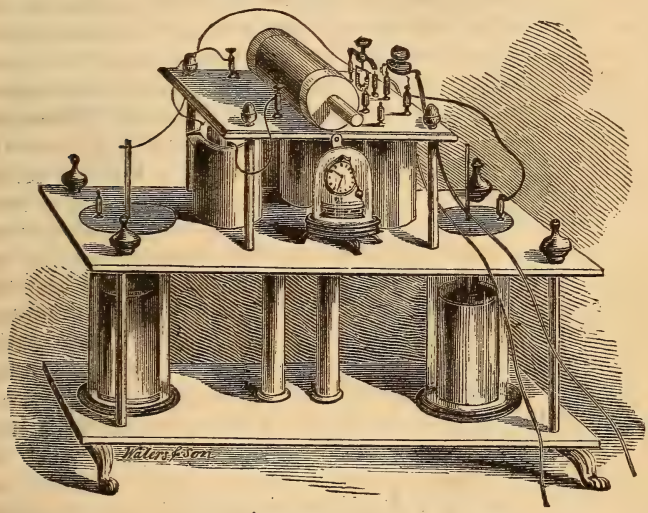
It is idle prattle to talk of making the lame walk by the use of a single electro-chemical bath. Instances do occur upon which to base such exaggerations, it is true: I have seen many such surprising results attend my own operations. But he who indiscriminately promises such success does positive injury in eight cases out of ten. It is enough to say that a skillfully administered electro-chemical bath will expel mineral poisons. This is a great achievement, and opens

the avenues of health to thousands who are suffering from the effects of old-school malpractice. After having cleansed the system of the vile poison, it only remains for the skillful physician to remove the injuries the system has sustained by its former presence.

Let not the temperate tone of the preceding paragraph lead any one to suppose that the blusterers, who startle whole communities with the announcement that they are curing everybody and every thing with electricity, are any better posted regarding its marvellous curative powers than the writer of this; I doubt if any one's experience in its employment can more than parallel my own. I say this, not in a spirit of boasting, but only in simple justice to myself, while cautioning the afflicted against exaggerated statements put forth by impostors. For the past fifteen years I have been a faithful student in electrical therapeutics, and have employed the agent in thousands of cases. A large practice has given me every opportunity to test its effects in all sorts of chronic diseases. The results, in a majority of them, have been truly wonderful; and those who have witnessed my operations have turned away with the settled conviction, that all a physician needs for permanent success, in every form of disease, is a well-constructed electro-magnetic machine, and a thorough knowledge of its use. One instance made an indelible impression on my mind. A German physician, who had been through the best European schools, and had had much experience in various hospitals, ridiculed the claim I set up for therapeutic electricity, and, under the supposition that he would see something to strengthen his prejudices, took pains to witness some of my operations. The results of his investigations were to him perfectly overwhelming, and after giving some applications himself, under my directions, he proposed to procure an electro-magnetic machine, and adopt electropathy as a specialty! I have made both rheumatic and paralytic invalids run and rejoice in the restoration of painful, contracted, stiff, and withered limbs. I have caused the haggard, downcast, cadaverous face of the dyspeptic to light up under the exhilarating effects of currents of electricity sent down the pneumogastric nerves to the stomach. I have imparted an elastic step and glow of health to many a woman who had for years before crept about her domicile under the debilitating effects of female weaknesses. I have given the neuralgic sufferer occasion to rejoice in my discoveries in electrical therapeutics. An interesting young woman,

a teacher in a popular New England institution of learning, once called upon me with a neuralgic difficulty. She had suffered a thousand deaths in the period of about ten years. From early girlhood, a rain-cloud had never darkened the horizon without aggravating her tortures to such an extent that she often implored her medical attendant to open an artery and let the horrors of such a life ebb away with the arterial fluid. She had tried every thing old school and new school had recommended, and her faith in all had vanished. The principal of the institution, however, had called on me and investigated the principles of my practice, and under his

Fig. 79.



DR. FOOTE'S MAGNETIC ELECTROMOTOR.

solicitation she determined to make one more attempt. After the fifth operation, a long, drizzling spring rain of nearly two weeks' duration set in, but her old tortures did not return. She wisely adopted a course of vegetable medication to render this good work permanent, and a year afterward she wrote that she had been entirely free from neuralgia. I might relate enough wonderful instances of my success in the employment of electricity to fill this volume; I have only given the foregoing instance because

of its peculiarity. In the practice of a life-time, a physician would hardly meet with another such sufferer.

From the foregoing paragraph it will be seen that the position I take in only recommending electricity as an *auxiliary* agent in the treatment of disease, is not at all in consequence of questionable success in its employment. Aside from the efforts I have made to keep up with all useful discoveries of other "magnopaths" and "electropaths" of this country and Europe, my own experience has suggested improvements and inventions which I could hardly do without.

Fig. 79 represents my magnetic electromotor. The original instrument was constructed piece by piece under my personal supervision. The merit of the instrument consists in its combining in one machine every advantage I could possibly derive from a room full of all sorts of electrical apparatus. It has different batteries for generating electricity and galvanism, so that I may be able to obtain just what I need for any subject that may be presented. The helix, which, with the aid of its appendages, magnetizes the fluids, gives off six different currents, from which I can select the one best adapted to the physical wants of the invalid; or, in complicated cases, two or more currents may be employed during one operation, as the case may require. It should be understood that the currents generated by different machines are not alike in their nature or effects. There is no more reason to doubt this fact than there is to doubt that there are various modifications or qualities of air, water, light, heat, etc.; indeed, the discoveries of science put the question at rest. It has been found that machines of different construction give forth varied results when tested on a subject. Electro-platers know that a current generated by what is called the to-and-fro or alternating machines, has not sufficient polarity for their use, and that a direct current has. Chemical electricity will traverse any metallic conductor, whether made of brass, copper, or silver, while pure magnetism will only pass along iron or steel. Different metals give forth currents of a different nature, when decomposed by the acid of a galvanic battery. Then, too, the nature of the galvanic current becomes changed in its passage through the helix.

It will be seen, then, that my magnetic electromotor, combining as it does all the best features of the many different machines for generating electricity, galvanism, and electro-magnetism, besides pos-

sessing some peculiarities of its own, and also the power to give off any kind of current wanted, is a great triumph of art. Having used it now for seven years, I have found it to possess every quality I herein claim for it, and the fact, that I can effectually influence the invalid with its mild and genial currents without giving the semblance of a shock, at once shows its superiority over every other instrument used for therapeutic purposes.

The most complete machine, however, capable of generating every variety of current, is but a small part. Electrical appliances of all sorts must accompany it in order to render it useful in all diseases. Instruments for the ear, eye, tongue, nasal passages, urethra, vagina, rectum, etc., etc., are all necessary for the successful application of electricity. Then, too, these instruments must be varied in their construction, so that currents can be either focalized or diffused in making entrance or exit. In my operating rooms, nearly fifty different appliances are employed, many of which are of my own invention. The most valuable of these is my magnetic-stool, for the treatment of womb difficulties, piles, constipation, liver obstructions, diseases of the male generative organs, etc. Unless mine has been imitated, it is the only one that has ever been constructed. In my extensive practice as an electrician, I have found the inconvenience and inefficiency of all contrivances for treating the procreative organs of both sexes. I set myself at work to supply the desideratum, and the invention of my magnetic-stool was the result. With this instrument, I can treat diseases of both sexes without subjecting their persons to indelicate exposure, as is necessary with the ordinary appliances; and in its efficiency, it is as much superior to what is commonly used, as the steam-engine is superior to the windmill.

Yet, a good, properly constructed electro-magnetic machine, and every necessary appliance, will not produce marvellous results, except in the hands of a good operator. Some physicians of high reputation cannot distinguish between the positive and negative poles of a machine, and much less explain the difference in the nature of the various currents and the proper one to be applied in a case. They apply it hap-hazard, and, as a consequence, will sometimes be thrown into ecstasies over its beneficial effects, and at others startled with its inefficiency. Such persons regard electricity as an uncertain therapeutic agent, and only employ it after every other expedient has been

resorted to in vain. To be a hard student as well as a practitioner; to investigate the *causes* of various phenomena; to labor to know precisely why a certain operation is to be performed in a particular way, and why it must be varied to suit the various "ills" and idiosyncrasies of different patients, is to be a hard worker, and, unfortunately for a world of invalids, too many who enter the medical profession, do so to escape labor and to secure for themselves social position and influence. After learning how to use electricity, the giving of an application is not as pleasant as sitting down with gold pencil over a sheet of gilt-edged paper and writing a prescription. In the latter instance, the pharmaceutist has the work to do, and he does not have to exercise his perception and muscle like an electropathic manipulator. The lazy, straight-jacketed, old-fogy disciples of Æsculapius received some pretty hard raps recently, in one of our largest metropolitan journals. In commenting on a controversy which sprang up between old-fogydom and medical progress, the editor said:—

"We do not, however, hear of any one on the side of the public, who, it strikes us, are the real sufferers in the matter. The journals have aired the theories of the Sangrados in articles of due weight and properly mysterious technicality. We speak a few plain words for the patients of the contending schools—for it is a war of schools, and nothing more. It is the bitter quarrel between the old-school fashionable practitioner, who adheres to the traditions of the last century, and the man of science who brings to his aid the newest discoveries. It is the theory of your fashionable physician to keep his delicate patients in such a condition that the yearly bill will be plethoric. He attempts no new-fangled experiments; he does not rudely tell madame that nothing really ails her, except laziness, but gives her a good deal of the latest gossip and a little harmless medicament. He is a nice doctor—affable to the ladies, and not unpopular with the men, and so kind to the children. He lives in a good quarter of the city, has a fine equipage, and altogether makes a good thing of it. He is an amiable man, takes things as they are, and when his patients die he lets them down easily. His funeral manner is superb, and nothing can be finer than the way in which he carries his work home. But sometimes the even tenor of the good man's life is disturbed by a horrid fiend in the shape of a new-light doctor—a fellow that has kept his eyes open; one who walks the hospitals,

is constant at cliniques, a hard reader, and thoroughly informed upon all the latest experiments, operations, and discoveries of European *savans*. The fashionable doctor is afraid of the new light. He commences by calling him young—which is a terrible blow, but one which is easily got over. Then he is a specialist. The old ladies—like the apple-woman who was called a parallellogram—don't exactly know what a specialist is, but conclude it must be something awful.

* * * * * * * * * * *

"Woe to the new light if he loses one of his patients. No language is strong enough to express the rage of the family doctor when he loses the chance of finishing up every member of it. * * * The scalpel kills more than the sword; the Latin prescription is often the death-warrant without the chance of a reprieve. * * *

"The medical faculty seem for the most part to be groping and guessing in the dark; a fact which, considering the difficult nature of their duties, would not reflect so much discredit upon them but for the obstinacy with which they persevere in shutting out such lights as are to be gleaned from the scientific labors of those who refuse to be guided by the formula of the old-school practitioners."

It is not often that a secular journal gives so much truth in so few words, and it seems specially hazardous for a newspaper to thus pitch into the allopathic doctors. Verily new-school must be becoming popular. New-school doctors have generally imagined themselves rowing against the popular tide; but when an influential journal publishes such sentiments as I have quoted, it looks as if we had outridden the storm, while allopaths are in danger of being "swamped."

Albeit, physicians should not be censured because they do not all become electrical operators. I have shown the necessity for having a perfect instrument for generating therapeutic electricity, and the great importance of knowing just how, when, and where to employ the proper currents; also the necessity of having ingenious appliances. But still one more qualification is essential to make a man an *eminently* successful operator. It is not something he can acquire by lifelong study; it is not a secret which a mechanical electrician can impart, with all his ingenuity; it is not a "kink" he can "get the hang of" by experience in applying the subtle agent. It is a God-given gift. It is the possession at all times of a good supply of

animal magnetism. To be a first-rate operator, a physician must be a *battery in himself.* In the treatment of many diseases, the current sent out of an instrument must be modified by individual electricity, or, as it is more commonly termed, "animal magnetism." There is great difference in individuals in the possession of this. While some are very positively magnetized, others are, naturally, extremely negative, and cannot impart to another the first particle of this invigorating influence.

The annexed cut, figure 80, will serve to illustrate this proposition. We will suppose the dots to represent the animal magnetic currents. The hand held above the head illustrates the magnetic power of a person who is highly electrical; the one above the right shoulder, that of a person considerably so; while the one over the left shoulder fairly illustrates one nearly destitute of animal magnetism, or individual electricity. Not that any one is entirely destitute, but many do not possess a sufficient supply to exert any perceptible influence over any one. To be a successful electropath, one must possess the highest amount of positive individual electricity, as represented by the hand above the head in the picture.

Fig. 80.

MAGNETIC HANDS.

Now, while I am well aware of the fallibility of this mode of treating disease, when adopted as a specialty by persons possessing the greatest amount of magnetism, and while I know that cures apparently effected by this power or agency alone, are seldom permanent ones, but reliefs of temporary duration, the truth cannot be gainsayed that the possession of this magnetic power is of vital importance to one who desires to be a successful electrical operator. I have found, in giving instructions in therapeutic electricity to physicians, that they differed greatly in the

power of employing it efficiently, even when they seemed to be equally proficient in the theory and practice. In other words, while they perfectly understood the *modus operandi* of making the manipulations, and the currents to be employed, the results of their experiments were widely different. This want of uniformity in their success I have attributed to the difference in the magnetic powers of different individuals, and how wisely, I leave it for the reader to decide, after having perused what I have herein written, and what will be further found in Part Third of this book.

In all disorders involving the nervous system, electricity, applied properly by a good operator, is an excellent substitute for popular anodynes. It has been the general custom of the medical profession to resort to stupefying narcotics to allay nervous irritability, which unquestionably produce temporary relief, but, as certainly, ultimate injury. I may truly say, that I have always found electricity to be eminently a nerve medicine, yielding timely relief, and no unwelcome reactive results.

For my patients residing at a distance, and who cannot avail themselves of treatment at my office, I prepare what I term *electrical medication.* I do not mean to shock the good sense of my readers by saying that an electrical property can be imparted to medicines, of such a nature that a metallic wire can conduct it off as from a galvanic battery or a Leyden-jar; but I do affirm, that I can prepare medicines in such a way that they will possess *latent* electrical properties which are at once rendered active by coming in contact with the gastric fluids of the stomach. I can, by my process, make medicines which will produce nervous force, and regulate its action. Such medicines are eminently recuperative, when prepared with reference to the requirements of each case, and while they are active enough for the successful treatment of all curable chronic diseases, and of hundreds supposed to be incurable, they possess no property which unduly excites or debilitates the patient. Electrical medication assimilates most charmingly with the nervous fluids; regulates their circulation; assuages pain; and invigorates the whole nervous system from the brain and spine, through all the nervous ramifications; while at the same time the individual properties of the ingredients are retained, and work thoroughly but mildly in the blood, casting out all impurities, and regulating the action of the various vital organs. In many cases, electrical medication is far more beneficial

than applications of electricity, and in all cases it is more efficacious than the manipulations of ordinary operators. With this nutritious, blood-toning, nerve-regulating, and vitalizing system of medication, I have annually treated, successfully, hundreds of patients laboring under difficult chronic diseases, whose faces I have never seen. My files contain letters from every State and Territory in the United States, and also from nearly every province of British and Spanish America; and I will further say that if I could, without violating confidence, publish their contents, my readers would almost conclude that the days of miracles are not past. Occasionally, a case presents itself, which absolutely requires the application of the element generated by mechanical and chemical apparatus. Such invalids, to obtain the required benefit, must present themselves in person, for the necessary electrical manipulations. After what I have said, it is hardly necessary to warn the reader against the impositions of inexperienced and unskillful electricians.

In injuries resulting from accident, electricity, skillfully applied, often cures without the aid of other remedies. The "*Christian Age*" relates an interesting case of a French officer, who, while making a reconnoissance near Sebastopol, during the hostilities between Russia and the allied powers of England, France, and Turkey, was knocked down by the wind of a cannon-ball, the shock of which was so severe as to cause paralysis of his tongue, so that he could neither move it nor speak. Obtaining leave of absence, he returned to Marseilles and placed himself under electrical treatment. After a few applications he could move his tongue with more facility, and at length, after an unusually powerful shock, his speech was fully restored to him. I might give several instances of nearly equal interest, which have occurred in my own practice, exhibiting the curative power of electricity in difficulties arising from accidental causes, but this one will suffice. With a few brief quotations from celebrated writers on therapeutic electricity, who testify to its value as an adjunctive remedial agent, I will conclude this essay:—

"Electricity," says Matteucci, "is the only irritant which can excite, at one time, sensation, and, at another, contraction, according to the direction in which it traverses a nerve."

Dr. Philips remarks that in cases "where there is a failure in the secreting power of the liver, or a defective action of the gall-tubes, I have repeatedly seen from galvanism the same effect on the biliary

system which arises from calomel; a copious bilious discharge from the bowels, coming on a few hours after the employment of galvanism."

Says Golding Bird, "It is the only direct emmenagogue which the experience of our profession has furnished. I do not think I have ever known it fail to excite menstruation, where the uterus was capable of performing this office."

"The beneficial effects of galvanism," says Sturgeon, "in asthma and bilious complaints, have several times come under my notice."

"Mr. Cole, house-surgeon to the Worcester Infirmary," according to the *Dublin Medical Journal*, "informed Dr. Philips that no other means employed there have been equally efficacious in relieving asthma, as galvanism."

The same paper observes that "Dr. Marcus reports several instances of the successful application of galvanism in the great hospital of Bamberg. One was a case of paralysis of the arm, in which a complete cure was effected. Another was one of violent headache after a remittent fever, which could not be subdued by any medical treatment."

"The same reason," says Smee, "for which electricity is valuable in amenorrhœa, might lead us to expect that it would tend to rectify the state of barrenness in the female; for, by causing it to act directly upon the uterus, it is calculated to increase the supply of blood, and thus remedy the deficit." I might here remark that I have been successful in curing several cases of barrenness, of many years' standing, by the application of electricity, aided by other remedies.

"One of the most important and curious of the physiological properties of the galvanic influence," says M. Donavan, "is its power over the peristaltic motion of the intestinal canal, and the consequent evacuation of the fæces. The power over the peristaltic motion, denied by Volta, was, I believe, first observed by Grapengiesser; but the resulting effects were discovered by M. Le Roy d'Eliolle."

"Costiveness in the bowels," says Sturgeon, "however obstinately it may resist the usual remedies, very soon yields to the galvanic treatment; and by a similar process, constipations generally may readily be vanquished."

"In disease of the eye," says Donavan, "the application of galvanism has been of the greatest service; there are many cases of cure on record."

The experience of many others might be added, equally commendatory of the therapeutic power of electricity; but as my object in making these quotations is merely to show what many eminent physicians, *of the old school*, across the Atlantic think of it, these are sufficient.

Animal Magnetism.

"Animal magnetism is a humbug!" No, reader, *you* believe in it. Your reason, perhaps, is not convinced, and you may think you do not. Then, why should I know better than you do what you have faith in? Let me tell you. The other day you came in collision with a chair and bruised your shin. Instinctively you bent over and rubbed the contused limb with your hand. The baby fell from your lap upon the floor; you picked it up hastily and rubbed its little head till it stopped crying. One night you were attacked with cramps in the stomach, and the hand flew there immediately; you pressed and manipulated the region where the suffering was felt until you were relieved. But a few days ago your wife had the headache, and as she reclined on the sofa, you sat beside her and passed your hand gently over her feverish temples. Now, all these instinctive, and I may almost say involuntary applications of the hand, in cases of physical distress, show that with all your professed skepticism, you, practically, believe in the efficacy of animal magnetism, and it is your experience and mine, and my observation as a medical man, that leads me to place animal magnetism prominently among what are denominated in this chapter Common Sense Remedies.

Dr. Frederic Anthony Mesmer was the first one, I believe, in the Christian world, to recognize the effects of animal magnetism, and employ this agent in the cure of disease. He promulgated his theory in Paris, in 1778, and was denounced as a humbug by the medical faculty, as a matter of course. In less than ten years later, one of his pupils, Marquis de Puységur discovered that some people could be put into an unconscious sleep by the power of animal magnetism, and this condition was called mesmeric sleep. Many have attempted to utilize what is now commonly called mesmerism in the cure of disease, but with no marked success, as comparatively few can be put into the mesmeric sleep. But thousands have professed the ability to cure suffering humanity by the "laying on of hands,"

manipulation, etc., a large number of whom were simply impostors, who effected little less than to prejudice the public mind against a valuable adjunctive agent for relieving the physical infirmities of mankind.

While the disciples of Mesmer have been laboring to make some headway in our Christian civilization, it would seem that in Japan the beneficial effects of animal magnetism are so far admitted that it is common to employ manipulators whenever anybody feels a little unwell. The manipulators are blind men, who go about the streets with long wands in their hands and reed whistles in their mouths, as represented in Fig. 81. The whistles are used to acquaint the residents along the thoroughfares through which they are passing, of their presence, as the horn or scream of the huckster is employed in our streets to attract customers. Fig. 82, represents one of these manipulators in the act of applying his cure to a Japanese woman. My informant, Mr. F.A. Wilson, for a long time attached to the United States naval service off the coast of Japan, presented me with this view in photograph. In the picture it is seen the patient is represented with drapery, but I am assured that, in the actual operation, female as well as male patients are entirely nude, and it may be that this is the reason why only blind men are employed as manipulators; although this hypothesis is weakened by the fact that

Fig. 81.

JAPANESE MANIPULATORS.

the women of Japan take no pains for concealment when taking their daily baths. Mr. Wilson has employed these magnetic manipulators many times with marked benefit. He remarks, that when one feels stiff or rheumatic from excessive muscular exercise, or from an attack of cold, a person arises from these manipulations feeling limbered and refreshed. The manipulators work over their patient for about thirty minutes, rubbing, kneading, and gently pinching them from head to foot, without missing a part, and for this service they charge what is only equal to about three cents of our money? Cheap enough!

Fig. 82.

JAPANESE MANIPULATION.

People are often relieved of pain by animal magnetism without knowing the active agent employed. There are many embrocations extensively advertised, and sold, which possess absolutely no merit in themselves while the real benefit attending their use arises, from the direction — "Rub in briskly with a warm hand for several minutes!" External remedies possessing valuable properties are always rendered more efficacious by the observance of such directions. In the religious world we find people employing animal magnetism combined with religious faith in the curing of disease, notwithstanding the fact that Mesmer was denounced by the clergy, and his discovery pronounced an attempt to use demoniac influence in relief of the sick. An extract, though somewhat lengthy, from the *News of the Church* is interesting, and may be appropriately quoted here to sustain my assertion. It is headed, "The Prayer Cure."

"A lawsuit which has lately taken place in Switzerland," remarks the editor, "has brought into public notice what has long been regarded with astonishment in private circles. It is well known that wondrous cures were effected some years ago, by Pastor Blumhard, merely by the efficacy of believing prayer. Now, in a village near the lake of Zurich, in Switzerland, there have been, for many years, similar cures effected by similar means. A woman named Dorothea Trudel stands at the head of an establishment whither persons afflicted with bodily and mental diseases, which had been pronounced incurable by ordinary treatment, have flocked in great numbers, and been healed. It is no holy well, no place of superstition, but a holy family, consisting of Dorothea Trudel, her sister, four nurses, and Mr. Samuel Zeller, son of the venerable Mr. Zeller, or Bueggen, and brother-in-law of Bishop Gobat, of Jerusalem. All of these assistants work night and day, attending to the patients without remuneration, merely out of love to God, and gratitude for having themselves been healed in the institution.

"The history of the wonderful woman at the head of the institution, as it came out at the trial, is something as follows:—Being born of poor parents, her education was very much neglected. At the age of twenty-two, the sudden death of a young female, with whom she had lived on intimate terms, made a deep impression on her mind, and was, under divine grace, the means of her conversion. The severity of the trial through which she at that time passed, undermined her constitution, and for many years she was confined to her bed. The long-continued trial of sickness developed the spiritual life in her soul, and brought her into close communion with God. She experienced many answers to her prayers, and when, on one occasion, five laborers in the house of a relative fell suddenly sick, the sickness being so obstinate that ordinary remedies were of no avail, her mind was much exercised with the peculiar case. She thought with herself that this was one of the cases which a believer might take to the risen and living Saviour for personal aid. She struggled long for strength, wrestling mightily with the Lord; and when her mind had obtained that access to the throne of grace which enabled her to believe her prayer would be heard, she came to the sick chamber, prayed over the patients, *and laid her hands upon them* in the name of the Lord. The sickness left them. It would seem that not only the bodily distemper was cured, but the minds were brought

into a new relation with Christ. In the course of years she had many similar experiences, and by degrees made it the business of her life to visit the sick and pray over them. Extraordinary cures often followed, in many cases suddenly. Contrary to her wish, sick people were brought to her house, and she had soon a little hospital. The medical men of the neighborhood interfered to prevent her practicing the healing art without a license, and she was fined, and ordered to desist.

"She could not, however, desist when people came to her house and begged her to pray with them, and as she used no other remedy than prayer, it seemed hard to prohibit her. By means of a legacy she was enabled to procure a larger house, and the numbers of distressed people, afflicted with every disease, who sought her aid, increased. Night and day she toiled, nursing the sick and praying with them, without remuneration. The poor she fed gratuitously; from the rich she took a small sum to pay for their board.

"Two sudden deaths took place, last year, of patients who had been residing at her house, and an investigation was instituted. On the instigation of the medical board, she was ordered to close the house within a certain time. She protested in vain that she used no medicines, that she was a simple woman, who knew nothing about diseases, but only knew that her Saviour could heal every ill. It was in vain. The sentence of the court ran, that she had confessed to devote her time to the healing of diseases, and, as she had no license, she must desist. On the advice of her lawyer, she appealed to the higher court. Hundreds of testimonials from the most eminent men in Switzerland and Germany were produced in her favor. Prelate Von Kapff, Professor Tholuck, and others, bore witness to her self-denying zeal and earnest prayers. It was proved that she made use of no other means but prayer. The counselor, Mr. Spondlin, of Zurich, conducted her case at the Superior Court.

"In a splendid and powerful speech this worthy counselor showed that it was not a case with which the medical men had any thing whatever to do. Miss Trudel's whole influence was brought to bear on the soul, and the healing of the body was a mere accidental circumstance. She, as an experienced Christian, admitted to her house whoever came—rich or poor, and especially the sick, who most required spiritual comfort. She promises no one a cure, nor does she declare any sickness incurable, but declared to each

patient, 'If you only believe, you may be healed by prayer. Let God abide.' The bodily cure follows the attainment of saving faith, or the lively exercise of that faith. The medical laws are designed to prevent quackery, not to prevent the physical benefits which flow from prayer. The charge that she prevents patients from applying to a regular physician in due time, must fall to the ground, for there is no law to fix the time when any one must send for a physician, or to prescribe that every patient must submit to be treated according to the prescriptions of a college of surgeons. The fact is, that most of her patients are such as have already spent all their substance on the physicians, and were nothing better but rather grew worse, and they came to her much too late, and it was no wonder if, after waiting for years in vain for a cure, the patient at last tried any plan by which he would only hope to be healed. If she never used medicinal means herself, neither did she forbid any one to use the prescriptions of a licensed physician. The worst of all was, that the doctors brought the charge against her without ever once examining her establishment, and could not show a single case in which her treatment had produced evil effects. Let any of them say as much for themselves.

"The counsels for the plaintiffs admitted the truth of all that was said in favor of the institution, and granted that the medical men had no right to prohibit prayer *and the laying on of hands*, but insisted that some restraint must be laid on the crowding of so many sick persons into one place. The court thought otherwise, and acquitted her of every charge, throwing all the costs on her accusers."

The result of the lawsuit was the grand triumph of a good woman, and a deserved rebuke to the doctors, who are too apt to play upon the popular prejudice in suppressing any thing which is irregular for the cure of disease, especially, if the "new humbug" is successful. Unsuccessful ones do not affect them, because they soon explode themselves. There can be no doubt in any rational mind that animal magnetism is the agent employed by this woman, nor will the religious mind question the claim that prayer contributed to make its employment efficacious. Good men and women always make the best magnopaths. Bad people cannot attain to any marked success in applying animal magnetism. The reason is that the subtle influence which emanates from the latter is poisonous. It is not necessary that a man or a woman be a professed Christian, or a member of any

religious sect; but he or she must possess a Christian spirit—a desire to do good—sympathy for the sufferings of mankind—to achieve any great success in administering animal magnetism. The blind Japanese manipulators may possess these qualities notwithstanding they may never have heard of the Christian religion.

The believers in animal magnetism and its phenomena among men eminent in science, embrace many names familiar to all intelligent people, such as Dr. William B. Carpenter, Professor Agassiz, Drs. Herbert Mayo, Hufeland Laplace, Cuvier, Professor Edward Hitchcock, etc. Many liberal-minded medical practitioners in Europe and America resort to it in a quiet, unostentatious way in cases which may be benefited by its judicious employment. M. Nelaton, an eminent surgeon of the Clinique Hospital, Paris, is said to resort to the practice of manipulation for sprains both recent and long standing, and instances are related of his great success. On this side of the Atlantic many men and women lay claim to extraordinary power as magnopaths, some of whom are able to give ample evidence of their ability, while the greater number possess little more vital magnetism than their own debilitated organizations require. Such persons are, of course, as incapable of imparting animal magnetism, as a pauper is of bestowing alms.

In my practice, I have for years employed animal magnetism with the most satisfactory results in combination with other remedial agents, and I might, if I imagined it would be interesting, give many illustrations of remarkable cures effected by magnetic manipulations accompanied with the aid of medicaments. I will, however, venture to give one of a peculiar character, as it was a chance cure.

While in Troy, N. Y., on a professional visit many years ago, a gentleman hobbled up-stairs to my rooms to consult me regarding rheumatism in one of his knee-joints, which had been very painful, and which had made his limb stiff for over a year. It appeared very difficult for him to walk, and the invalid exhibited in his countenance that contortion of features so peculiar to one suffering pain, that no one in health could possibly imitate. Then, too, the knee was red and swollen. I gave it a very careful examination, following up each muscle that could be reached, with my fingers, for several inches, to see if I could discover any contraction or rigidity. I then examined his blood, stated my opinion, and my terms for treatment. He expressed himself favorably impressed with the interview, and promised

to call in the afternoon and decide whether or not he would place himself under my care. He had hardly been out of my rooms ten minutes, when he returned with a look of indescribable surprise, and exclaimed—"What have you done to my knee, Doctor?" "Why do you ask?" I interrogated. His reply considerably astonished me, for he said he had both descended and ascended the stairs without pain, and at the same time gesticulated with the limb, moving it backward and forward to show its mobility. I of course saw at once what my magnetism had done for it while manipulating his muscles, and explained the philosophy of the phenomenon. I say, I was astonished, because I did not exercise my will-power, as I am in the habit of doing in imparting animal magnetism. It was an act of unintentional magnetic piracy on his part, and he bore off his booty in triumph. I could not have been more successful if I had seated myself deliberately and magnetized his painful joint.

The permanency of such cures, as a rule, I am inclined to question, unless the magnetic treatment is accompanied or followed with vegetable medication, to remove the predisposing cause or causes of any local affection. It ought not to be employed to the exclusion of medical remedies. Those who do ride the "one hobby" have a great many hard things said of them, which they partly deserve. They also bring to contempt an agency for the amelioration of human suffering which is worthy the attention of all intelligent physicians, and of their patients whose maladies might be benefited by its employment. While there are many invalids so peculiarly affected that they cannot be restored without animal-magnetic treatment, the majority of these very cases cannot be radically cured by this agency, unaided by suitable medicine.

Water.

In all ages of the world, and in all nations, civilized and barbarous, water has ever been held in high estimation as a remedial agent. Hippocrates, Pindar, Thales, Virgil, Pliny, Galen, Charlemagne, Hahnemann, Priessnitz, Wesley, and all distinguished philosophers, physicians, and theologians, ancient and modern, have extolled its virtues. It was Priessnitz who made it a "one-cure-all." He was the first to open a "Water-Cure." Priessnitz was great, but Priessnitz was an *enthusiast*. Still his enthusiasm was the result of extraordinary success, compared with the medical exploits of the allopathic

profession with which his rural abode was surrounded. His hydropathy cured thousands—hundreds managed to survive the barbarities of allopathy. He killed a few—allopathy slaughtered daily more than Priessnitz healed. The zeal of a military chieftain heightens with the number he slays; that of a medical practitioner with the number he keeps alive. Is it strange that Priessnitz was an enthusiast?

Yet the establishment of the school called hydropathy was an error. Water is *not* an infallible remedy, and less so in the hands of the disciples of Priessnitz than in those of the great founder himself. The latter was naturally gifted with peculiar skill in the application of water, which characteristic exhibited itself in the juvenility of the son of the Graefenberg farmer. But a medical education would have materially modified his "one-ideaism." Priessnitz did not possess that. Had he explored the green fields and forests of nature, as well as laved in her limpid waters, he would have been less exclusive in his choice of remedies, and his practice, and that of his imitators, would have been more uniformly successful. Many hydropathic physicians are beginning to see what their prototype, in his blind enthusiasm, failed to perceive, and already mild medication and therapeutic electricity are being introduced in water-cure establishments to some extent.

Fig. 56.

PRIESSNITZ'S MEDICINE.

While I do not deny the contracting and relaxing influences of water, according to its temperature, and the beneficial effects of each of these in appropriate cases, I maintain that the real philosophy of "water-cure" is based on electrical principles. Water possesses a great amount of electricity. *If the blood of an individual contains its natural supply of iron, it attracts the electricity from the water, thereby rendering the body of the invalid in an electrically positive con*

dition compared with the atmosphere. As soon, then, as the application has been made, an active radiation of electricity from the system takes place, which accelerates the escape of effete matter, and renders the pores, skin, and other organs more active. It is therefore diametrically wrong to resort to water in the treatment of invalids with thin blood. Did hydropathists, generally, understand this philosophy, "water-cure" would not prove so often *water-kill.* My theory is indirectly supported by that of Priessnitz. According to Claridge, he held:—

1st. "That by the hydropathic treatment, the bad juices are brought to, and discharged by, the skin."

2d. "That a new circulation is given to the diseased or inactive organs, and better juices infused into them."

3d. "That all the functions of the body are brought into a normal state, not by operating upon any particular function, but upon the whole."

Now when we consider that whatever moves has a motive power, and that "better juices" cannot enter, or "bad juices" depart from the system, without some active agent to move them, my theory is not only rendered plausible, but probable. Thus, when the electricity of the water enters the body, water must necessarily go with it, because its relations are such with that element that it forms a part of it; and in this way better juices are infused. When the application of water ceases, the body being electrified by that fluid and rendered strongly positive, compared with the surrounding atmosphere, active electrical radiation ensues, carrying with it the "bad juices" which nature, in its instinctive wisdom, is ever ready to dispose of when opportunity is presented.

The great amount of electricity possessed by water has been demonstrated by Prof. Faraday, and is now generally admitted by chemists. His experiments show that the quantity of electricity set free by the decomposition of ten drops of water is actually greater than exists in the most vivid flash of lightning.

In bloodless patients, tepid and hot baths are injurious, because the blood does not possess the attractive property or iron to draw in the electricity of the water, while its temperature relaxes the tissues and leaves the system open to the ingress and progress of disease. It is safe to say that a majority of invalids suffering with debility, nervousness, consumption, and predisposition to apoplexy, should

not receive full hydropathic treatment. In many cases of these descriptions it should not be administered at all, and in most only sparingly and with great discrimination.

Satisfied of the virtues of water as an *auxiliary* agent, I have resorted to it extensively in my practice, and by exercising the most careful discrimination, with uniform success. Simple and abundant as this remedy is, it is something which cannot be trifled with. Many a good man and woman has unwittingly committed suicide with water. Hydropathy is not as popular to-day as it was twenty years ago, on this account. It is a great pity that mankind is disposed to abuse and misuse almost every good thing.

"The universal application of water," says Prof. Cook, "may be safely called in question. The assertion that it is equally efficacious in any and every form of disease is so at variance with past experience in single remedies, that it has induced the greater portion of practitioners to discard it at once. The success of hydropaths is undoubtedly great; but it is well known that a prominent feature in their institutions is a rigid adherence to hygiene. Wholesome diet, fresh air, exercise, mental relaxation, etc., which, of themselves, have a very great effect in restoring the patient, are more strictly enjoined by them than by any other school; and as most practitioners are too inattentive to these matters, the hydropaths have the advantage on this point. Besides, without any disparagement to water-cures, it must be remembered that those cases in which water fails are not reported, any more than the failures of other schools. Many cases have occurred under my own observation, in which hydropathy, as applied in one of the best establishments in this State, had failed, but which subsequently yielded, and were cured by botanical remedies. This goes strongly to convince me that it is not universally applicable."

"In union there is strength," is a political proverb of universal application. The Botanics, Hydropaths, Electropaths, and Magnopaths should coalesce, under the name of the Utilitarian practice. Such a coalition could not fail to defeat disease in every aspect which it presents itself. By a discriminate application of one or all, according to the indications of a case, many valuable lives might be daily saved which are now lost in consequence of bigoted medical "one-ideaism." I have assiduously pursued all these systems in my practice, and would rather abandon my profession than to discon-

tinue any one of them, although I must candidly confess that I would rather give up hydropathy than vegetable medication and therapeutic electricity, were I obliged to remove one plank from my medical platform. If forced to drop one, the choice would rest between water and electricity, and I am thoroughly convinced that the latter can be made far more conducive to the requirements of the invalid than the former. My attention is wholly devoted to the treatment of chronic diseases, and in such my experience demonstrates that electricity can be made more available. In the treatment of acute disease, particularly fevers, water may be, and, without doubt is, preferable.

Medicated Inhalation.

Having found this system of treating pulmonary diseases a valuable *assistant* in my practice, I should not close this chapter on remedies without, at least, an allusion to it. I have heard much said of curing lung and bronchial diseases by medicated inhalation. Allow me to make the bold assertion that a disease of the pulmonary organs was never *radically cured* by medicated inhalation alone.

In support of this view, I have only to invite the attention of the reader to a consideration of the causes which lead to pulmonary and bronchial complaints. It is well known that an abscess under the arm, tubercles on the skin, and ulcers on the limbs, denote an impure condition of the blood, from which they all arise. Is it not then, self-evident that any of these difficulties located in the delicate membranes of the respiratory organs give evidence of and spring from the same cause? Is there an Æsculapian wiseacre who can command enough sophism to seemingly disprove this?

The blood is not impartial in the distribution of its impurities, but invariably sends them to that part of the system which has the least power to resist them. Hence, persons having a scrofulous or canker humor in the blood, and at the same time a predisposition to weak lungs, the worst form of ulcerous or tuberculous consumption is in time developed. The question then arises, will medicated inhalation cleanse the blood of its impurities? If not, how can a radical cure be effected?

There are other forms of consumption, such as those induced by amenorrhœa, thin blood, solidification of the lungs, etc. The first,

of course, is peculiar only to females. Will inhalation remove the cause from which springs the effect? The second arises from general debility, and a diseased action of the liver and kidneys. Will inhalation arouse the lethargic functions of the system, and restore to the blood its strength and nutrition? The third either grows out of one of the different forms of consumption first considered, or else from a weakness of the nerve or electric force, which expands and contracts the air vesicles and moves the diaphragm. The medicated vapors inhaled must therefore possess miraculous powers in the restoration of the tone of the vascular and nervous system, or a cure cannot be effected.

Consumptive invalids, who resort to inhalation alone for relief, as well as physicians who practice on that system, lose sight of one important fact—i. e., *consumption of the lungs and bronchitis are only the* EFFECTS *of other derangements of the system.*

It is unnecessary to occupy space with an argument to show how certainly a convalescent consumptive must relapse when *effects* are treated and *causes* left undisturbed. If this essay should happen to meet the eye of any one who *thinks* he has been cured of consumption or bronchitis by inhalation, let me assure him that either his physician was mistaken in the diagnosis of his disease, or his old complaint still lurks in his system, ready at any favorable time, when exposure occurs, to return with redoubled virulence.

I prescribe inhaling remedies in pulmonary and bronchial difficulties, for the same reason I do washes and ointments in the management of cutaneous diseases. Local applications are often necessary, while the slow but sure work of purification is going on internally; but to rely on them exclusively, is presumptuous, to say the least. I often find it necessary to summon electropathy or magnopathy to my aid in battling the hydra-headed disease—consumption. I *always* prescribe invigorating and purifying blood medicines in addition to medicated inhalation, and should as soon think of dipping out the Croton river without cutting off its tributaries, as to attempt to cure consumption without them.

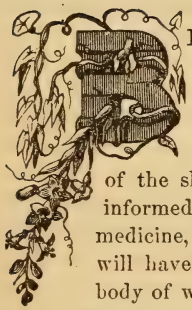
Conclusion.

The *successful* physician does not ride "one hobby." One-ideaism in medical practice is perfectly incompatible with uniform success.

Then, too, different constitutions require different remedies. A "one-cure-all" is an impossibility. One hat will not fit everybody's head—one coat everybody's back, nor one circumscribed medical system everybody's disease. The medical profession generally must mount a more comprehensive platform. Let us have a Utilitarian School, in which all approved systems shall be united, and in which all remedial agents shall be weighed in the scale of utility, and admitted or rejected, according to their merits or demerits. The world is full of "pathies," not one of which is sufficient in itself to meet the exigencies of diseased mankind.

CHAPTER V.

DOCTORS.



EFORE passing a criticism upon the profession myself, allow me to give a few specimens of the hard raps they receive from various sources. Some graceless wag has said that "Physicians are the nut-crackers used by angels to get our souls out of the shells that surround them!" When Voltaire was informed that a friend was preparing for the practice of medicine, he exclaimed: "Why will he be so mean? He will have to thrust drugs of which he knows little, into a body of which he knows less!" A story is told of a doctor and a military officer who became enamored of the same lady. Somebody inquired of her which of the two suitors she intended to favor. Her reply was, that "It was difficult for her to determine, as they were both such *killing* creatures." The *Portland Transcript* relates that at a "Medical Convention holden at Lewiston, the clergy and members of the bar were invited to a repast given at a hotel by the followers of Galen; and after the cloth was removed, during the interchange of sentiments, the Rev. Mr. B., while alluding to the intimate relations between the clergy and the physician, in all seriousness remarked, that it was a somewhat singular fact that '*When the doctor was called, the minister was sure to follow.*' The doctors gave him three cheers." A newspaper at Lynn, noticing this scrap, remarked that it was reminded of a hard hit at the doctors, which may be found in the Bible, in the 16th chapter of the second book of Chronicles: "And Asa in the thirty-ninth year of his reign was diseased in his feet, until his disease was exceedingly great; yet in his disease he sought not to the Lord, *but to the physicians.* And Asa slept with his fathers, and died in the one and fortieth year of his reign." Still another editor thought he discovered a harder rap on the medical fraternity, in Mark's Gospel, 5th chapter and 26th verse,

relating to a "certain woman who *had suffered many things of many physicians*, and had spent all that she had, and was nothing bettered, *but rather grew worse.*"

Where the editors stopped in this tirade it is difficult to say; but one of our city physicians received a "stunning" surprise from a red-man, when on a summer vacation in Michigan, two summers ago. Dr. G. was being rowed across the St. Clair River by two Indians, who had a stupid half-drunken companion stowed away in the bow, whom they familiarly called "Doctor." Dr. G.'s curiosity was aroused, and he inquired why they called that man Doctor. The red-men rowed away lustily without replying, knowing that their guest and patron was a physician. Again he asked, and received no response. The Indians evidently did not like to tell. As they neared the shore, Dr. G. could endure the suspense no longer, and approaching within whispering distance, again repeated the question—"Why do you call that fellow Doctor?" "Cause," said the red-face, very vehemently, "he d—n fool!" Dr. G. gracefully subsided!

While all the foregoing are jokes, the perpetration of them indicates an undercurrent of prejudice against the profession, which quite universally exists. Few entertain it toward any honorable member of the profession individually; but they regard doctors as a class, as necessary evils, and by no means equal to what is required of them by suffering humanity. One reason for this is that so many men of mediocre ability enter the profession. The rich man who has a son mentally unqualified to be a lawyer, morally unfitted to be made a minister, and who has not the capacity to make a successful business man, is very likely to be sent to a medical school. He may there acquire, parrot-like, the names of the various organs of the body, and by tolerably hard study, a passable knowledge of the dispensatory; and, concealing his natural incapacity in a dust of technicalities which he ostentatiously kicks up when he emerges from the college, diploma in hand, he passes among quite intelligent people for an accomplished physician. Then there are many young men who work their way up through poverty, and desiring to enter some one of the professions, are quite apt to select that of medicine, without once asking themselves if they have any natural aptitude for the discharge of its duties. Thus the medical schools are annually graduating young doctors as numerously as the Yankee factories are turning out all sorts of "notions."

Another reason for want of confidence in the profession at large is its want of originality in devising means to relieve suffering humanity. There are not enough inventive and independent men among the doctors. Surgery makes some progress, but medicine very little, excepting among men who are willing to be reviled as "quacks," rather than follow the beaten paths of the "regulars." Young physicians enter upon the practice of medicine with the idea that they have only to follow the rules given in their books, and the precepts of their alma mater, to raise the sick from beds of suffering, and make themselves famous for skill. The thinking ones discover their mistake in a few months or years, and make amends by embracing the remedies and systems of other schools. Some do this without attempt at concealment, and others vary the practice of their particular school while claiming to remain true to its teaching. They have too much professional-caste-pride to admit that they at all deviate from the creed of their faculty. The non-thinking, booby-class, stick to the text blindly. They shut their eyes to every new medical invention; will not listen to any report of good coming from any other school; fully believe, every time they lose a patient, that it is in the dispensation of Divine Providence that people should die at the particular juncture that they yield up their last breath; they are entirely satisfied that they have done the best that could be done, and they feel perfectly resigned to the will of the Supreme Being! Men of no medical attainments whatever often succeed, through good sense and ingenuity, in curing people who have been set aside to die by the doctors. It has almost become a proverb that a good nurse is better than a physician; and an invalid is more ready to take the advice and herb tea of some good old mother or "aunty," than the counsel and drugs of the polished physician. Indeed, the latter is often employed for no other reason than to silence the clamor of friends, who would be shocked if the patient should die without the attendance of a popular doctor. The chaise at the door, and the gold-mounted cane in the hall, are evidences that nothing is left undone which may in any way contribute to the restoration of the one prostrated on a bed of sickness! Still another reason for the lack of confidence of the people in physicians, and the partial failure of the latter in making themselves worthy of confidence, will be found in the next essay.

Doctors "Jacks at all Trades."

There can be no greater folly in a physician than to attempt, within the brief period of his mundane existence, to acquire skill in the treatment of *all* diseases to which mankind is subject. A large majority of the members of the medical profession are like the versatile mechanic, who is said to be a "jack at all trades and master of none." Any man who tasks his ingenuity by trying to unite in himself the house-carpenter, the joiner, the cabinet-maker, the carver, the pump-maker, the ship-carpenter, and chair-maker, may generally be set down as a man of extensive pretensions and meagre executive abilities. The professional man who assumes to combine in himself the politician, the pedagogue, the editor, the pettifogger, the domine, etc., may possibly exhibit some little tact in all, but he will as surely excel in none. So with the physician who would be a skillful surgeon, an accomplished accoucheur, and a successful doctor, in diseases both acute and chronic; he divides his attention to such a degree as to render him unskillful in the performance of the duties of any one of them.

There ought, at least, to be *three* distinct branches in the medical profession. *The Surgeon:* He must be a natural mechanic, and as well acquainted with the mechanism of the human system, as the watchmaker is with the fine works of a time-piece. His sympathies must be sufficently blunt to enable him to take the human system apart with a steady nerve. He must be as deaf to the cries of his patient as if he were moved by machinery like an automaton. *The Physician in acute diseases:* He must have a fair knowledge of anatomy, and be thoroughly accomplished in materia medica. He must be sympathetic; a constant student, and thoroughly acquainted with all the symptoms presented in what are called acute diseases. He must have a taste for the duties of his vocation, and not pursue them simply with an eye to business. *The Physician in chronic diseases:* He, too, must have a pretty good knowledge of the organs and functions of the body, and of the science of materia medica. He must have the sympathetic nature of a woman, and the patience of a mother. He must possess that intuition which will enable him to seek out the hidden causes of disease—to comprehend the relation which one complication sustains to another. He must move around

with his eyes and ears open—ready to enlarge his medical resources. He must, in brief, possess ingenuity, observation, intuition, sympathy, patience, and a spirit of perseverance and industry. He must love humanity, and pursue his profession mainly because he loves to do good. These are three entirely different vocations, even more dissimilar than house-building, cabinet-making, and ship-building. Surely surgery is totally unlike prescribing for the sick, and it may be easily shown that there is no similarity whatever between acute and chronic diseases.

Now, why should the physician be a jack at all trades any more than the mechanic, the lawyer, the school-teacher, or merchant? Look at the various departments in mercantile pursuits. The jeweller does not traffic in dry-goods, nor the dry-goods merchant in hardware, nor the grocer in watches, nor the furniture dealer in tinware, nor the crockery merchant in sugar. Occasionally these branches are united in sparsely settled villages, and in such localities a physician might be excused for playing the surgeon and doctor in acute diseases, but a person residing in a small place suffering with a chronic complaint can avail himself of a city physician who devotes his entire attention to such disorders, and the village doctor should not tamper with this class of diseases if he desires to be successful and to do injury to no one.

In large towns there is not a shadow of an excuse for a physician to practice all branches of his profession, to the manifest detriment of a large portion of his patients. Every physician knows, or ought to know, in what class of diseases he is most successful, and in the treatment of which his mental capacities and acquirements best qualify him, and to this particular class he should devote his undivided attention, and not, like a patent medicine, proclaim himself an infallible cure for every disease.

With such a classification as I propose, the man who wants a limb amputated would go to the surgeon whose daily experience qualifies him to do his work skillfully; one with a fever would send for a doctor whose experience is daily ripened in his exclusive attendance upon the calls of sufferers with acute diseases; one with consumption, or other lingering disease, would call upon a physician whose attention is solely given to the treatment of chronic disorders, in the constant management of which he is daily acquiring additional skill.

In trying to cover the whole ground, a physician cannot possibly

acquire superior skill before his locks are hoary and his energies paralyzed with age, and then, to use a common expression, "he is too lazy" to put to active use the acquirements which long years of study and experience have bestowed on him. How many, too, the old man has killed in preparing himself for skill and eminence, which he cannot bequeath to any younger relative or friend.

What nonsense, then, for men to attempt to grasp knowledge and skill in all branches of the healing art, blundering along through years of unproficiency, dodging from the operating chair of a surgeon to the sick-bed of a feverish patient, and from the accouchement bed to an examination of, and prescription for, a chronic disease of the lungs, liver, kidneys, stomach, or something else.

So far as I am concerned, I wish it distinctly understood that I have nothing to do with surgery or acute diseases, my whole study and practice being solely devoted to complaints of a chronic nature. In these I claim to be proficient, and stand ready to compare the results of my practice with that of any *ten* physicians, put together, who essay to treat all classes of disease.

For the benefit of such of my patients as need surgical operations of any kind, I have a separate surgical bureau under the management of a physician skillful in this department; but personally, I meddle with nothing outside of my specialty. If physicians generally would pursue this course, the public would in time entertain a better opinion of the medical profession, and doctors would cease to be the butts of ridicule.

Female Doctors.

There is a great deal of debate nowadays as to the fitness of women for the profession of medicine. Is the serious consideration of this question intended to dignify and inflate the hordes of masculine boobies who throng our medical universities, or, to utterly disparage the intelligence of women? Which? For all who gravely entertain it I would make the following infallible prescription :—

℞ Common Sense, gr. j.
Justice, ʒ j
Mind your business, q. s.
Mix.

Make this compound into ten pills, and take one every five minutes when the question disturbs your conservative mind, until relieved. The disease is strictly a mental one, proceeding in men, from excessive vanity, and in women, from a servile zeal in flattering a sex already bloated with arrogance.

It seems really difficult to write a word seriously under this head, for the reason that when the question is presented to any impartial mind, it would appear that if there is any one avocation to which woman is better suited by nature than to another, it is the care of the sick. Look for a moment at the qualities requisite to make a good physician. They are: keen perception—intuition—sympathy—patience—gentleness—love. No one, who has ever been stretched upon a bed of sickness, will omit from the category one of these qualities as unnecessary. Only two qualifications remain to be added, viz.: an enthusiasm to undertake the duties of the profession, and a thorough education. No one will dispute that the first qualities named, are generally possessed to a greater degree by women than by men. Of the qualifications last mentioned, there is as little danger of women becoming doctors without a natural taste for the labors of the profession, as there is of men doing so; and if any are disposed to assert that they are mentally incapable of acquiring an accomplished medical education when proper facilities are afforded, I suppose that person must be answered, although I blush at the indignity offered to women, while undertaking the task. How do we generally find it in schools? Is it indeed the case that boys learn more rapidly than girls? *Reverse* the question, and teachers will respond "Yes." Some claim that girls cannot attain proficiency in mathematics. This has never been established by any satisfactory evidence; and if it were, what need has a physician of a complete mathematical education? Others have said that she is not inventive. It is true that she has not flooded the patent office with caveats and applications for patents; possibly because husbands and fathers have usurped for their personal benefit nearly every thing which the female mind may have suggested. But an objection of this kind may be effectually met by the facts that Madame Ducoudray invented the manikin, and Madame Boivin some of the most useful obstetrical instruments in use. The lady last mentioned is the author of several medical works, which are regarded as authorities by many eminent medical men in Europe and America. Professor Meigs, of Philadelphia, in

alluding to the valuable services this eminent woman has rendered to the medical profession, remarks that: "Her writings prove her to have been a most learned physician, and as she enjoyed a very large practice, her science and her great clinical experience, as well as her personal knowledge, are more to be relied on than that of all male physicians together." In England, a person must pass a rigid examination to become a druggist, and a Miss Garrett passed "a five years' apprenticeship; a preliminary examination in arts, and two professional examinations, each comprising five subjects." Miss Garrett was reported to have acquitted herself brilliantly, and the chairman of the apothecaries, after complimenting her ability, expressed a wish "that all men in the profession were as well prepared."

The time is rapidly approaching, however, when the success of women in the practice of medicine will be so well established that no one will have the effrontery to question her capacity in this pursuit. Since Elizabeth Blackwell graduated from the medical school at Geneva, New York, twenty years ago, various medical colleges and hospitals have been established for the benefit of women.

There are medical institutions for the instruction of women in this city, Philadelphia, Cincinnati, Cleveland, and perhaps other cities of the United States. There are about three hundred female physicians in this country, who graduated regularly from chartered institutions. Some of these have incomes of ten or twenty thousand dollars per year from their practice.

In England, France, Germany, and Austria, women have been admitted to practice. At this rate it will not take many years to convince the most knotty conservative mind that women will practice medicine, and that, too, with credit to themselves and satisfaction to their patients.

There is one point wherein those favorable to women as practitioners of medicine fail to appreciate the benefit which may accrue when female practitioners become available in every part of the country. The presentation of it at this time will sound as ridiculous as the claim of women to study medicine did twenty years ago; but I trust that another score of years will not pass before it is recognized. It is this: *male invalids should have female physicians, and female invalids should have male physicians.*

One great argument used at this time for the admission of women

to the practice of medicine is, that they may attend to the diseases peculiar to their own sex; but if the truth were fully known, the secret of the opposition of women to their own sex aspiring to fame in the medical profession, springs out of repugnance, in a measure, to any such arrangement. Women do not want female doctors to attend them. There are, of course, some actual and many seeming exceptions to this rule; but if there were as many eminent women in practice at this moment as there are men, the majority of women would at heart prefer that the latter attend them; and so soon as women become famous as doctors, men will not hesitate to exhibit a preference for female skill. This secret crops out even now, and may be perceived by any observer. The sick man who has a skillful female nurse in his room is charmed with her attentions, and takes her advice and the little dainties she prepares, without hesitation. The visit of his physician is accepted as an evil that cannot be dispensed with, and when he has departed, the patient sagely questions the *rationale* of his counsels and prescriptions. On the other hand, the sick woman, if her preferences in the selection of a physician have not been wantonly disregarded, dotes on the call of her doctor, and feels better when he is present. She takes his doses about as submissively as the sick man swallows the pleasant things the nurse prepares. The philosophy of all this may be discovered in the essay on "Sexual Starvation," commencing on page 164. I have taken some pains to ascertain the sentiments of intelligent patients of both sexes on this point, and although they at first appeared startled at the novelty of the idea, having never thought of such a thing before, they almost without exception, on reflection, agreed that such an arrangement would best accord with their individual preferences, if skill were equally divided between doctors of each sex. As things now are, the most steadfast friends of the family doctor are women. Every woman who has a really good physician, recommends him to everybody, and is impatient because she cannot induce her next-door neighbor to employ him. To her imagination, he is about the nicest man, and the most skillful doctor the world has ever produced. Men never get so enthusiastic over their medical adviser, although they may express gratitude when relieved of pain by him. In the latter case, the relief is obtained mainly through the effects of medicaments administered; but with the woman, the benefit is about equally derived from the medicines and the magnetism of the doctor. He presses

his hand on her brow, feels of her pulse, sits for awhile beside her, and chats as only a person of one sex can talk with one of the other. The conversation becomes flippant and cheerful; the spirits rise like mercury in the thermometer when held in a warm hand; the effect is magical; and when he departs, she looks forward with pleasure to the next call, while taking his prescriptions with confidence and alacrity during the interval. This, understand me, when she has the physician of her choice. Woe to the doctor if she does not like him personally! She hesitates to send for him when her friends think it necessary. She never did take such nasty stuff before! She knows it can do her no good! "Oh, dear! how can my husband have any confidence in that fellow?"

Now, reader, here is a new crotchet for you to mentally digest. Bring the results of your observation, your personal experience, physiological and magnetic law, to bear upon its consideration. Dismiss all idea of any impropriety in employing a female doctor if a man, or a masculine doctor if a woman. Indeed, the latter have had very little medical care from any other source than that of their opposite sex; but scarcely anybody seems to have discovered any impropriety in the custom which sanctions it. I speak now as a man's-rights-man! I demand for our sex the medical education of women in order that we may, when sick, have their sympathy, advice, and medical care. Who can consistently oppose the proposition? Certainly not those women who have objected to the medical education of women because they are satisfied to have only male doctors; this would be selfish. Nor yet men who think the latter may be with propriety employed to attend their wives and daughters in all cases however delicate. "What is sauce for the goose, is sauce for the gander!" It is, then, left for those only who are in favor of female medical schools and practitioners, to urge an objection. Nothing can consistently come from this quarter; for when female physicians become numerous, it may, in sparsely-settled regions, be quite as difficult to employ a male practitioner as it is now to find a female physician. The latter may take the place of many of the former entirely in some localities; so it will be perceived that "things will become mixed," unavoidably, unless we have some definite idea of the distinct functions of male and female practitioners, and act upon it. If it be decided that we must have female doctors for men, and male physicians for women, it will encourage

the settlement of those of each sex in every neighborhood, large or small; and then, when any one has an affection of a very delicate character, peculiar to his or her sex, there will be an opportunity to "change base," and present the case to a physician of the same sex as the patient.

Rapacious Doctors.

The finny inhabitants of the sea have sharks among them. On land there are beasts and birds of prey. The human family is not exempt from analogous specimens. There are vampires among all classes, trades, and professions. Sharp practice in trade, however, produces no immediate effect upon any thing except the pocket; but the physician who prostitutes his profession by frightening, and then picking the pockets of the sick, places himself on a level with those monsters in human shape, who, amid the crash and ruin of earthquakes, sack falling buildings and rifle the bodies of the prostrate and dying. "Your money or your life!" is the ejaculation of the highwayman, and it is morally and practically the demand of the rapacious physician. These strictures by no means apply to those who, by assiduous devotion to the studies and duties of the profession, acquire a reputation which enables them to charge and receive large fees for their services. It is perfectly consistent with the commercial spirit of our imperfect civilization, and in exact keeping with the business understanding which our social system has established, to do so. The minister of the gospel who possesses the greatest power to edify a congregation, generally finds it his Christian duty to accept a call from the church which pays the highest salary. The lawyer who has gained a reputation in his profession, is so beset with clients that he can keep his practice within the limits of his physical endurance only by charging such fees as will frighten away from his office what are commonly denominated "small fry." The merchant who possesses a mind that enables him to conduct an extensive establishment, makes his millions per year, while his smaller competitors are satisfied with their thousands or hundreds. The experienced navigator, who can trace a path covered by fathomless water, commands a larger salary than the captain of an oyster sloop, who guides his craft by landmarks and light-houses. The mechanic who has acquired such skill in handicraft as to be able to construct a steam-engine, receives greater pay than one who can only hammer out a pot-hook. The

farmer who has studied so deeply into the science of agriculture that he rivals his less enterprising neighbors in the production of fine crops, receives a correspondingly larger compensation for his wisdom and industry. Even Bridget, in the kitchen, who understands all the arts of cooking, receives five or ten dollars more per month than her muscular sister who can only do the household scrubbing. It is, therefore, entirely in harmony with the established law regulating compensations, for the skillful physician to limit his personal labors to his power to do, by charging fees commensurate with his ability; but the rapacious doctor is one who, for the express purpose of making fees, alarms those who consult him. I will give a couple of illustrations of an aggravating character which came under my immediate observation. One Sabbath morning I was summoned to my consultation room by a woman of about thirty years of age, who looked the picture of despair. Every feature betokened agonizing distress. She had passed many sleepless nights in apprehension of an early and painful death. This apprehension was occasioned by the consultation of a doctor who pronounced her disease, cancer in the stomach; and, as if this diagnosis was not sufficiently alarming in itself, he told her she would not live six weeks if she did not have immediate medical attention. Fortunately he placed his fees above her ability to pay. I say fortunately, because had she become his patient, she would have been frightened and drugged into a condition of disease. Unable to raise the required money, she sought other advice. After examining her case, I assured her that there was nothing in the world the matter but a slight attack of gastritis, caused by some imprudence in eating. She had consulted the doctor only on account of momentary pain, such as anybody may have by eating something which might disturb the digestion. After some effort, I quieted her fears, and sent her away without fee or medicine. Some months after, she called to assure me of the correctness of my diagnosis, and to thank me for the mental relief my opinion had rendered. Case number two was a planter from Louisiana, who had come to the city to sell a cargo of sugar. He had the appearance of a man of means, and was a capital subject for a rapacious doctor. He called upon me with the remark that he had stricture of the urethra. Upon examination, no symptom warranted any such supposition, and I asked him why he had imagined that he was strictured. He replied that he had, before leaving New Orleans, a disease of the

urethra liable to result in stricture, and that on arriving in New York, he had consulted a physician to ascertain if such a difficulty was developing. The doctor examined his case, and gravely decided that the urethra had already become the seat of stricture. He prescribed for him, and received a fee of thirty dollars! Making further investigation, to be sure that I was quite right, and finding not the first indication of any complaint, I assured him that there was nothing at all the matter, and advised him to let medicines and doctors alone; but the idea seemed fixed in his imagination that there was, and with strange persistency, he inquired if I would not undertake his case. What, thought I, shall I do with this man? My business and moral faculties had a soliloquy. The latter told me that if I accepted his money it would burn my pocket and disturb my sleep. Finally, I said, "Mr. A——, let this alone for four weeks, and if at the end of that time any thing like stricture shows itself, I will prescribe for you." He departed, and in less than ten days called again, and informed me that he felt an unusual uneasiness in the urethra. On examination I found the orifice inflamed, and inquired if he had not been using bougies. "Yes," was his response, "the doctor who before prescribed for me, advised them." I urged him to let the supposed affection alone, as he was causing irritation; and made him promise that he would wait the time I had before advised; but before the expiration of twenty days he fell into the hands of another rapacious medical concern, more ravenous than the first—had paid $100; and now they demanded $1,400 more before they could perfect a cure! The man was so thoroughly scared that he actually thought of accepting these exorbitant terms, and it was with difficulty that I talked him out of the notion which the doctors had talked into him. Determining not to be remotely accessory to the robbery of this frightened man, I refused, from first to last, to receive one cent from him. I say this in justice to myself, for it is due to my self-respect, at the close of this remarkable story, that I should publicly wash my hands of all participation in the revenue accruing from the sharp practice of the doctors in this case. Whether he finally followed my advice I am unable to say, as he did not call again.

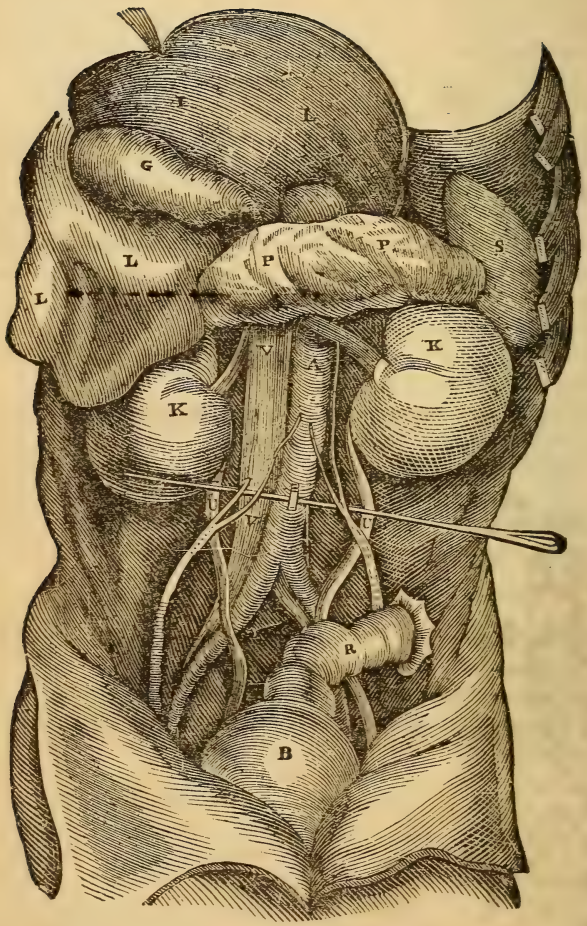
While some people are not apt to realize the danger they are in when diseased, many become unduly alarmed on the slightest occasion of pain or other physical disturbance; and it is better that the former die in their ignorance, than that the latter should be frightened

to death by an intentionally deceptive, or a careless diagnosis. It, therefore, should be the aim of the honorable physician to avoid arousing unnecessary alarm in the minds of invalids or those who may imagine that they are sick; and the latter should not be too credulous when a doctor tells them that their symptoms indicate danger. Indeed, the honesty of any physician may be suspected when he takes apparent pains to impress on the invalid a sense of anxiety about himself. This duty may safely be left to the friends of the invalid if he be not himself sufficiently concerned to take the necessary steps for effecting his recovery. Anxious mothers, sisters, husbands, and wives are generally quick to observe the signs of failing health in one they love, and unfortunately they sometimes unduly alarm the invalid by their expressions of solicitude. In no case is it necessary for the doctor to do so, even in expressing a candid opinion, as there is a way of pronouncing an unfavorable diagnosis without arousing the timidity of the patient.

Fortunately for the sick, the practice of medicine has a humanizing effect upon the hearts of men who pursue it. Daily contact with suffering humanity develops sympathy and liberality, so that even the mercenary doctor of to day, may in time become too considerate of the health and life of those who consult him, to prey upon their fears.

Conclusion.

With the close of the foregoing essay we reach not only the end of this chapter, but the termination of Part I. The author hopes that the reader has been interested and benefited by the perusal of "Medical Common Sense" thus far, and so trusting, he introduces you to Part II.



THE ABDOMINAL CAVITY LAID OPEN.

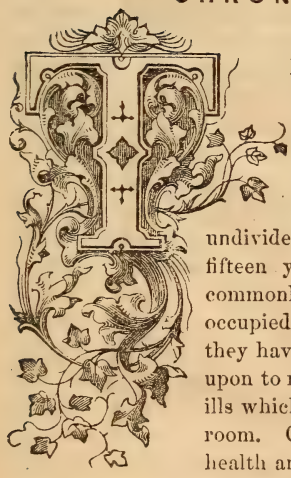
The intestines are mostly removed, showing the descending aorta, A; the ascending vena cava, V; the liver raised up, exposing its under surface, L; gall-bladder, G; pancreas, P; kidneys, K; spleen, S; rectum, R; bladder, B.

PART II.

Chronic Diseases: their Causes and Successful Treatment.

OPENING CHAPTER.

CHRONIC DISEASES.



THIS portion of "Medical Common Sense" designated as Part Second, will be devoted to essays on those forms of disease usually known by the name of *chronic*. To the treatment of chronic affections the author has given his undivided personal attention for a period of fifteen years. Physicians devoted to what is commonly termed "Family practice," are so occupied with the management of acute disease, they have little patience and less skill if called upon to remove any thing more than the physical ills which confine their patients to their bed or room. Consequently, when a person is out of health and yet able to be about, he imagines he must "grin and bear it," as his family physician fails to prescribe any thing which affords more than present relief. If he decides to try skill which is regarded as eminent, he is then liable to fall into

the hands of some surgeon who has carved out of the flesh and bones of his fellow-beings, an immortal name. The public fails to discriminate between the qualifications necessary for a successful surgeon, and those requisite for success in medicine. Dr. Knife has performed operations in cutting out tumor; in removing an entire nose, and making a new one; in taking out a portion of the jaw; in taking somebody pretty much all to pieces and putting him together again, etc. etc; all of which operations have been duly chronicled in the columns of the daily press, and excited the surprise of the multitude. On the other hand, Dr. Herb has actually taken cases pronounced as consumption; others considered as incurable dyspeptics; and still others of women dragging out a miserable existence with female complaints; and these supposed incurables, he medicates and advises until they are thoroughly restored, much to the surprise of their friends. The newspapers take no notice of these remarkable cures; and they are known to but the limited circle of those immediately interested. Why? Because a reporter for the press could not be on the spot those long weary weeks or months to witness the growing strength and ultimate triumph. The doctor's story told to the editor, seldom elicits his earnest attention, as he hardly considers the hero of this medical feat, a competent witness. If he takes the pains to inquire about the matter in the neighborhood, it is quite likely some envious resident physician will "put a flea in his ear;" Poh! Poh! at the whole thing; and gravely declare that the invalid was in a fair way to recover before the "quack" was employed. So Mr. Editor thinks it is quite as safe to say nothing about the matter. Thus in this little illustration it will be seen how easily an expert surgeon can build up a great reputation by a few important operations, and how slowly the skillful man of medicine rises by a gradual extension of a knowledge of his ability; and even at the apex of his success, he has not attained that celebrity which the surgeon acquired by the extraordinary stories of his surgical feats, published as they were in widely circulating journals on both sides of the Atlantic. This country has produced surgeons who have a world-wide celebrity, and justly so; but whose medical attainments, or at least success in *medicine*, have been less marked than those of some obscure village doctors. Indeed I could name two or three who are as well known in Europe as in America, having performed operations that made their names famous, but whose advice I would

not accept in any case of disease, acute or chronic, requiring the administration of medicine. I would sooner put my case, if I were not able to take care of it myself, in the hands of somebody's grandmother than to trust to their combined skill.

The public, however, seldom notice the means by which the surgeon acquires reputation; and consequently, when the family physician fails to cure an invalid, and it is thought best to try other skill, he is almost sure to fall next into the hands of some man eminent in surgery, and bitter is the disappointment if this *great* physician (?) fails to produce any change for the better. Heart-sick and discouraged the patient abandons his avocations and prepares for the other world, if the medicines have produced adverse instead of beneficial results. "My fate is sealed" mutters the disconsolate invalid, "if this great man can do me no good." The world is full of these discouraged people, many of whom are naturally so enduring —so tenacious of life—that they cannot die, while existence to them is but prolonged misery. But is it really true that there is no help for these sufferers? From the experience and success I have had in an extensive practice exclusively devoted to this very class of diseases, I can conscientiously assure my readers that there is. Not that *all* can be cured; this would be an extravagant assumption; no miracles are proposed. In a majority of cases, however, pronounced incurable by the faculty, and esteemed in the neighborhood where they exist as hopeless,—there is help—there is permanent relief; but that succor must be sought at the hands of some one who is as familiar with the peculiarities of these diseases as the surgeon is with anatomy and the instruments he uses in his operating room. Do not go to the blacksmith for bread, nor to the baker to have your wagon repaired.

What is a Chronic Disease?

There is a deal of vague apprehension in the minds of professional as well as non-professional men and women, as to what constitutes a chronic disease. Some physicians in family practice denominate every thing chronic which their advice and prescriptions do not cure. Not a few people conjecture that it is a term applicable only to diseases of a disreputable character. An advertisement was once rejected by one of our leading daily journals, because it contained the

word chronic! Even Hahnemann, the founder of homœopathy, held that all diseases not ultimately curable by nature's spontaneous effort, were not only chronic, but had their origin either immediately or remotely in syphilis or badly treated itch. To many there is a terror in the name CHRONIC, to the extent that they at once imagine themselves consigned to uninterrupted suffering and a lingering death, when the family physician gravely looks over his spectacles and remarks—"Your disease has assumed a chronic form." Webster defines it as a disease of an inveterate nature, or of long continuance, in distinction from an acute disease which speedily terminates. This definition is not strictly correct.

A chronic affection is one in which disease has insidiously taken possession of the human system, or become triumphant after a painful struggle of long or short duration; while an acute affection is one in which the struggle is actually going on, at which juncture it is difficult to tell, from hour to hour, whether nature will prove victorious and the patient get well, or the disease come off conqueror, and leave the patient stone dead or physically infirm. If the latter, then chronic disease has succeeded the acute attack. Through improper habits of living, impurities may creep into the blood, and infirmities take possession of the system as quietly as filibusters sometimes creep one by one into a country, and peacefully revolutionize it. The filibusters become too powerful to be resisted, before the native inhabitants are apprised of their presence. So the seeds of chronic disease may stealthily and steadily gather in the system until they become too formidable for the recuperative powers of nature to resist, when, as one patient remarked to me, "Disease became my normal condition." Or, a person may be born diseased, in which case the recuperative powers from birth were bound as with cords. In either case, whether disease has quietly taken possession of the system, or been handed down from generation to generation, nature may in time sufficiently rally to make an attack, and then comes the acute struggle, called acute disease, just as when disease is acting on the offensive. This is an important combat, and when the smoke of battle clears away, the patient may find that he has recovered or attained to a condition of health; if not, he relapses into his former condition of lingering infirmity, and his diseases are called chronic.

Acute disease may precede and usher in the chronic form. With-

out any symptom of warning, the victim may be prostrated with contagion, poison, or fever. In this case disease comes with banners and trumpets, and a fierce conflict ensues between the bold enemy and the vis-medicatrix-naturæ. Friends watch anxiously at the bedside; the countenance of the attending physician is studied for encouragement; unnecessary work is suspended to attend to the sufferer; all is excitement and anxiety as when a fierce battle is raging between your own armies and those of an enemy. The day and night pass. The sun glimmers through the lattice-windows, and rests upon the face of the sick man. Is nature coping successfully with the enemy? If so, the patient will in a few days or weeks be restored to his wonted health. If nature's powers waver, the enemy triumphs, and the victim is either slain or released from his bed on parole. If the latter, the patient bears about with him what may properly be termed a chronic disease.

One word more, and I will take leave of this chapter. Let it not be inferred from what has been said, that chronic disease can be cured only by bringing on what the hydropathists call a "Crisis." The predisposing or perpetuating causes may be gradually overcome without precipitating a struggle such as is presented in the conflict between nature and disease, just as chronic disease is sometimes acquired by the gradual ingathering of blood-impurities and nervous derangements. This gradual revolution of the system may be reversed in favor of health, and although it will not be possible in all cases to avoid a crisis, it had better be averted if possible, even though the patient pursue treatment longer. We may better take more time in physical as well as moral reform, than to precipitate a stormy conflict.

CHAPTER II.

CHRONIC DISEASES OF THE BREATHING ORGANS.

BEFORE entering upon an investigation of the causes, nature, and management of affections which should be considered under this head, let us stop for a moment and observe the importance of the organs with which we breathe. Every living thing has to have air to enable it to exist. Even the plants and trees have lungs; but by a strange provision of nature, they are enabled, in cold climates, to do without them during the winter. (It would be a happy arrangement for consumptive people if they could do so too.) The foliage constitutes the lungs of vegetation, and if a tree be girdled so as to prevent the sap (blood) from passing up through its branches (bronchial tubes) to the leaves (lungs), it will perish. By this plan of girdling, a woodman may strangle a forest of oak as easily as an orchard of apple-trees. In Fig. 84 we have a representation of the respiratory system of a tree, and in Fig. 85 a representation of the breathing passages of the human system.

By this comparison we find them quite analogous; but if we dissect the two we shall at once be struck with the greater completeness of the respiratory organs which appertain to animal life.

The minutest insect must breathe or die. Corked in a bottle, or otherwise confined, the tiny gnat, as well as the noisy bee, will die so soon as the vitalizing properties of the air in the confined vessel are consumed. Fishes must breathe or cease to swim. Their lungs are so wonderfully formed, and fringed by what are called their gills, that they separate the air from the water; and while the water passes into their mouths and through their gills, they receive the life-giving properties of air. When taken out of the water they live

until the slimy secretions of their delicate breathing apparatus becomes gluey, and then, as one by one the air-passages are sealed up, respiration becomes more and more difficult, until the function of breathing ceases altogether. It is not impossible that human ingenuity may some time invent something that will perform the peculiar function of the gills, so that the appliance attached to the head and shoulders of a human being will enable him to live for hours under water; but it will be time better employed for the present to devise means to enable all to breathe above water. Many are troubled to do this, and die for want of breath, when all other but the respiratory organs are unimpaired. A majority of the doctors, and all the surgeons, seem to rather hasten than to arrest disease affecting the organs with which we breathe. One eminent surgeon has remarked that, "Consumptives are not subjects for medical treatment, except when it is necessary to smooth the path to the grave." This is honest, and it would be well if all surgeons and physicians in family practice would make haste and come to the same conclusion, and act consistently therewith. The public are slowly discovering that to obtain relief from this class of affections, they must go out of the "Regular Practice," and employ the services of somebody who gives special attention to what are termed chronic diseases.

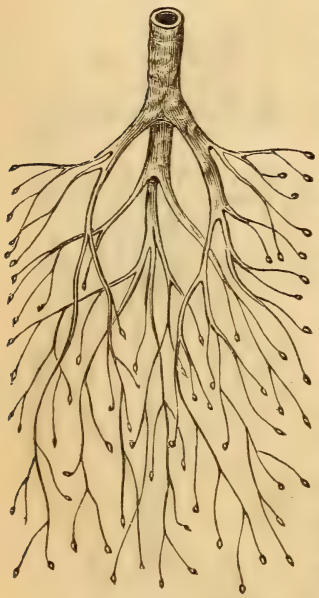
Fig. 84.

RESPIRATORY SYSTEM OF A TREE.

The breathing passages of the human body begin at the nose, where the air should in all cases be received, in order that it may be filtered of dust, and warmed by its passage through the spongy mass of animal fibre which intervenes between the nasal cavities and the vesicles of the lungs. On entering the nostrils, the air passes down through the filtering membranes to the throat and bronchial tubes, and is by these latter organs conducted into the little cells called

vesicles, which are so numerous that it is computed the lungs contain six hundred millions of them, and that their entire surface is equal to fifteen hundred square feet! Here, with only a thin transparent membrane intervening, it comes in contact with the venous blood. This venous blood has traversed the whole system, and gathered up the useless gases to be respired. Quickly as the touch of strawberry juice on your clean white collar imparts a stain of red, the dark carbonaceous blood is changed to a rich arterial complexion, and then goes on its way to distribute the valuable properties it has derived from its commercial visit to one of the great physiological marts. The blood, indeed, carries on a regular trade between the various organs of the body and the atmosphere, the lungs being one of its principal ports. It barters off carbonic acid gas for oxygen, and although it seems almost like sharp practice, the atmosphere does not seem to realize that it is cheated, but at once makes use of what it receives in its great laboratory, as if it had made a capital exchange; but we would hastily adjudge the gardener a fool who would give a pound of vegetables for a pound of compost! Considering, therefore, the liberal arrangement nature has made for this unequal exchange, the least we can do is to keep the roads in good order, so that the carbonic acid gas may be brought without impediment to the place where it may be disposed of on such generous terms. To do this we must keep the breathing passages of the head, throat, bronchia, and lungs in a healthy condition, and the essays given in this chapter will point out the most common difficulties which interfere to prevent this, and present some important suggestions on their prevention and cure.

Fig. 85.

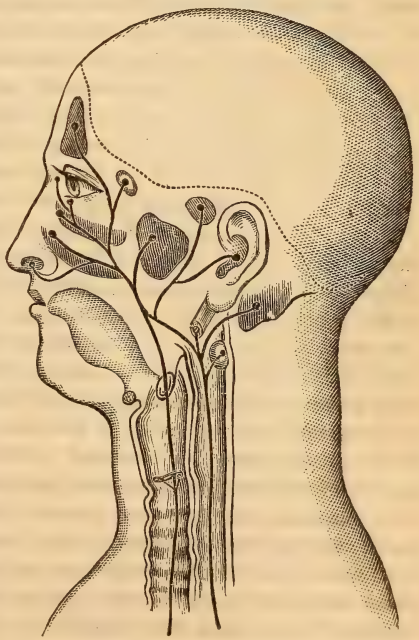


RESPIRATORY SYSTEM OF MAN.

Chronic Catarrh of the Head.

There is no affection of the breathing passages, excepting actual consumption, that more effectually obstructs the action of the respiratory apparatus than chronic catarrh of the head. The purulent mucous secretions which characterize this difficulty, not only block up in many cases the air-passages of the head, but they pass along down into the larynx; run into, and coat the bronchial tubes; and not unfrequently lodge in the air-vesicles of the lungs. Thus obstructed, thus coated, thus filled up, in the act of respiration, the air with difficulty passes the blockade, and when it enters the cells of the lungs it finds them muffled almost to imperviousness; in consequence of which the blood is but partially relieved of its carbonaceous qualities, and is insufficiently vitalized by oxygen. The annexed cut, Fig. 86, represents the canals and sinuses, or cavities, in the bones of the face, in which catarrhal secretions are liable to occur. The dark patches are intended to illustrate the cavities, and the black lines the canals. The latter are not separate and distinct tubes, as might be inferred by the lines made to represent them. The lines are simply designed to trace the course of the smaller cavities which unite the larger ones, and further to illustrate how catarrhal secretions are conducted into the respiratory organs below, and also how they may reach and affect

Fig. 86.



THE CAVITIES IN THE BONES OF THE FACE SUBJECT TO CATARRH.

the eyes and ears. This cut beautifully illustrates the parts liable to the affection under consideration, and was designed expressly for this book.

Catarrh is a common complaint. Almost everybody, at times, has a touch of it, while some never know what it is to be free from the distemper. Many people are affected with it who do not mistrust that it is a disease. They imagine that the discharges from the head are but the natural wastes of the mucous membrane. Such persons ought to be informed that the healthy mucous membrane secretes only a sufficiency of mucus to keep it moist or free from uncomfortable dryness, and that when there is a discharge from the nose or an expectoration of mucus from the throat, there exists a disease of that membrane known by the name of catarrh. This affection in many cases, produces no painful symptoms, and presents no evidence of its existence other than the accumulation of phlegm in the breathing passages. In others, it is attended with heaviness and perhaps pain in the base of the forehead; redness of the eyes; dulness of hearing, and ringing in the ears. In more susceptible cases it produces inflammation of the eyes, and deafness; or tickling in the throat and cough; or foul breath and decomposition of the facial bones; or loss of taste and smell.

The medical profession are about as much befogged in regard to the cause of catarrh as the masses of the people. In the days of Hippocrates, it was supposed to be the effete secretions of the brain, which found vent at the nose, eyes, and ears! When Galen was accounted authority, it was thought that there was a kind of animal vapor constantly rising in the human system, which on reaching the arch of the skull, gathered there, and, passing through a process of condensation like the steam in the cover of a tea-kettle, drizzled down through the facial orifices! It was not suspected until the seventeenth century, that catarrhal matter emanated from the glands of the mucous membrane, and ever since then, the doctors have been mainly treating it as if it were simply a local disease; and it has been a favorite target for all sorts of medical sportsmen to fire at. Some shoot astringent liquids into the nostrils; others play fine streams of medicated spray into the breathing passages; another attempts to flank the enemy by throwing dust into his eyes in the form of catarrh snuff; while still another medical wiseacre thinks he will smoke or steam him out with some newly invented fumes or vapors.

It is not to be disputed that some of these inventions may prove valuable as *adjunctives*; but they should only be so employed, for catarrh is really the result of a diseased state of the blood. It seems to me very easy to account for catarrh, and I will here present a theory which I have never seen promulgated, but which the intelligent reader will, I am confident, regard as common-senseful. Checked perspiration, such as may occur whether a person is conscious of having taken a cold or not, confines within the skin the acidulous and effete vapors which in health pass off in the form of insensible perspiration; and these properties, thrown back upon the blood, cause inflammation, and this inflammation decomposes some of the corpuscles and other solid substances of the blood; reduces a portion of them to purulent matter, just as the inflammation of a running sore eats away and decomposes the animal fibre about it. As this melting of the solid constituents of the blood proceeds, an outlet must be found for decayed matter, and as it more nearly resembles mucus than any other of the secretions, the mucous glands come to the rescue, and this purulent matter sweats through the mucous membrane as profusely in some cases, as common perspiration pours through the skin of an excited man on a sultry day. When the checked perspiration, the cold, or influenza, is overcome, and the skin becomes again active, the catarrhal symptoms may possibly disappear without treatment; but if they do not, one of two conclusions may be fairly deduced: either the blood has been so poisoned by the effete matters thrown back upon it, that it has not recuperative power sufficient to recover and arrest this rotting of its solid constituents; or else the blood possessed beforehand impurities which rendered it susceptible to attack, and which have become too active to subside without the aid of medicine calculated to enrich and purify the vascular fluids. Upon this hypothesis regarding the pathology of catarrh, I have cured cases of this disease of twenty years' standing.

Whenever a case of catarrh outlasts the cold which precipitated it, the difficulty may reasonably be called chronic, and it will be found upon examination with the speculum that the mucous membrane appears blanched and thickened, with here and there raw and inflamed patches. The secretion by this time is either thick and gluey, so as to coat over the delicate lining of the breathing passages below, or possessed of less consistency and greater acrimony, so that it

scalds and inflames the membrane over which it passes. In all cases of a pulmonary diathesis, either of these conditions is threatening, and will lead to serious lung complications unless timely arrested. In other cases of different idiosyncrasy, it may confine its operations so much to the sinuses and the organs of special sense, that deafness, blindness, loss of smell and taste may be the results—one or all—of its progress. Or it may limit its action entirely to the breathing passages of the head, causing simply bad breath and unwholesome expectoration. In no case, however, can the full benefit of the function of respiration be obtained while catarrh in any form exists. If it does not absolutely stop up the air-passages of the head, it vitiates every breath of air the person inhales; for in its mildest form the viscid matter is corrupt, and imparts a taint to the air which comes in contact with it. Then, just to the extent that it spreads itself over and coats the membrane lining the bronchial tubes and air vesicles, it renders these organs less capable of performing their work of vitalizing the blood. So it will be seen that catarrh is self-supporting when once established in the head; for while it is perpetuated by impure blood, it so poisons the air inhaled, and so obstructs the meeting of the air and blood in the vesicles of the lungs, that the vascular fluids are still further impaired and made capable of supplying indefinitely the diseased matter, which the mucous glands will secrete. The catarrhal secretions of to-day poison the blood, and this poison decomposes enough of the substance of the blood to cause a copious catarrhal secretion to-morrow —and that to-morrow repeats the process, and so on illimitably. If this action and reaction be arrested simply by local means for a few weeks or months, the patient is pretty sure to have a return of the distemper unless all the offensive matters have been expelled from the circulation; consequently, even in the lightest cases of catarrh, constitutional treatment should be used in conjunction with what may be done locally. In cases of women when only topically treated for catarrh, the disease in some instances is driven to the vagina, causing copious leucorrhœa, then the latter treated locally results in the resumption of the catarrh of the head. In this way it is driven from one point to the other, alternately, until the patient becomes nearly discouraged. I might occupy considerable space here in presenting the history of some cases illustrative of this statement, but as the personal experience of many female readers will corroborate it, this

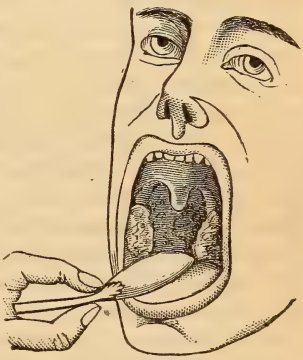
course is hardly necessary. Those having catarrh who have become faithless as to its curability are invited to a perusal of the extracts of letters from patients given in the closing chapter of this part. My success is the result of combining constitutional with local treatment. By pursuing this course I have found catarrh, in most cases, a disease which may be easily and permanently disposed of.

Chronic Affections of the Throat.

Now let us take a peep into the throat. Bring a spoon or something with which to hold the tongue down. We are supposed to have a patient affected with throat difficulties as represented in the annexed cut.

You see those spongy-looking bodies on either side of the orifice leading to the throat? They are the tonsils, which in some cases become so inflamed and swollen as almost to obliterate the passage. By pressing them, instead of sending out a transparent mucous fluid as they do in health, a thick white, green, or yellow matter issues from them. They are enlarged, and your doctor may advise you to have them clipped off a little, but I would discountenance haste in this emergency. An operation of this kind should not be performed unless other means have failed. Generally, medicine will cure them. That little round pendulous thing that hangs down between the tonsils is the uvula. That too, in some cases, is inflamed and unduly elongated—so much so, that when the mouth is closed it will rest upon the tongue. It may be thought best to take off a little piece of that; but it is not well to allow any operation of the kind, unless it be too long when no inflammation is present. Sometimes there is what may be called a congenital elongation, in which case only it may be abridged by the surgeon. That arched like membrane over the entrance to the throat, from the upper central part of which the uvula is suspended, is popularly called the "Soft Palate." Behind, and below that, the membrane cover-

Fig. 87.



THE DISEASED THROAT.

ing the back wall of the throat has a fiery red appearance, with patches of white or yellow matter here and there; or perhaps a few ulcers are interspersed. Your family doctor will want to cauterize the diseased membrane. Do not accept too quickly of this advice. It may be well to resort to cauterization in some cases, but the cautery had better be avoided until more gentle means are tried. The application of caustic to the mucous membrane always leaves it in a sensitive condition; and if the blood is overloaded with impurities, the ulceration is absolutely made worse by its application. It acts like a local irritant, and diverts the impurities to the place where it is applied.

There are many people who are subject, whenever there is a change of weather, to sore throat. They are said to be *predisposed* to affections of the throat. Why this predisposition? The *immediate* cause is generally known. Some stubborn man "with a big overcoat" in the cars, would keep the window open and our neighbor caught an awful cold. This, in his opinion, was the cause of his difficulty, and, indeed, so it was the *immediate* cause, but if he had escaped this exposure some other would have precipitated the same difficulty, because his system was in a condition to *predispose* him to just such an attack. Perhaps the predisposing cause was hereditary—perhaps it was incurred by impure vaccination to prevent the much dreaded small-pox—possibly it was contracted in youth by dissipated habits—it may be that the invalid had a scrofulous ancestry; but however this predisposition may have been obtained, it will in all such cases be found to exist in the blood. Consequently, an impure quality of the vascular fluids may be set down as the *predisposing* cause. There are those who constantly carry about with them enlarged and inflamed tonsils, and possibly ulcerated throats. In these cases, it will be found on investigation that their troubles arise from syphilitic impurities; or an inherited scrofulous taint; or possibly from contracted scrofulous impurity; but syphilitic or scrofulous blood, one or the other, is the predisposing cause.

There is still another affection called laryngitis, or "clergyman's sore throat," which arises from milder impurities of the blood. While clergymen appear more subject to it than other people, it is, nevertheless, a common disease among the members of the legal profession, public singers, school-teachers, lecturers, auctioneers, and those who are obliged to exercise their vocal organs to a considerable extent. In talking, public speaking, and singing, the air, ex-

pelled as it always is, with vehemence, has a frictional effect upon the mucous membrane, just as rubbing the finger on the cuticle produces friction of the skin. This friction produces heat—the heat attracts the humoral properties of the blood—the presence of these produces irritation—irritation induces inflammation, and if the blood is in a scrofulous or syphilitic condition the inflammation may cause ulceration. Laryngitis is characterized by hoarseness and weakness of voice; dry cough; and sometimes with pain and soreness about the throat. Catarrh of the head often so irritates the throat as to invite blood-impurities there, and in childhood diphtheria, measles, scarlet fever, colds, &c., are the immediate causes.

Fig. 88.

ULCERATED LARYNX.

Gargles of various kinds are generally resorted to for relief from throat affections; but they are as insufficient, so far as any permanent relief is concerned, as snuff and vapors are for catarrh. The blood must receive the most attention.

The sufferer from throat troubles, catarrh, or other difficulties, is always tempted to go to work at once locally. He imagines that if he can only bring something of a healing character in contact with those irritated or ulcerated surfaces, he can overcome the evil; and after having tried all sorts of local panaceas, he is too liable to conclude that his difficulty is incurable, and that he must go through life with it; but in nearly all cases when the faith of this class of patients can be sufficiently established to enable them to go patiently at work in the use of remedies, skillfully prepared, to act upon constitutional or predisposing causes, they are agreeably surprised to find that this class of difficulties may be disposed of permanently with comparatively little trouble. The faithless are commended to a perusal of Chapter XIII. in this part.

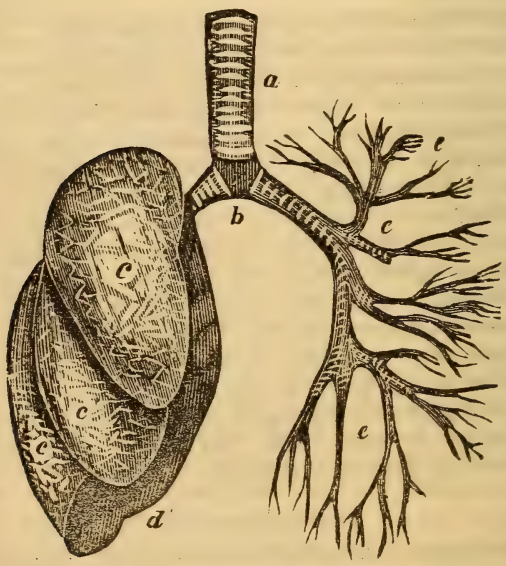
Chronic Bronchitis.

Here is a disease which often proves obstinate in the hands of those physicians who have had limited experience in its treatment, and those who so imperfectly comprehend its nature and origin as to resort to little else than inhalants and expectorants. In this, as in diseases of the head and throat, the predisposing cause is apt to be overlooked. Bronchitis has its root in an impure condition of the

blood. Some imprudence or unavoidable exposure may have brought on the difficulty, but if it does not pass off readily with the cold which ushered it in, doubt should not exist for a moment that the blood of the patient is mainly at fault. When this disease first makes its appearance, it usually presents the acute form, and is attended with a dry cough, showing a preponderance of the positive fluids; but when it becomes chronic, excessive expectoration ensues, evincing an entire inversion of the disease, and a preponderance of the negative alkaline fluids.

Unless checked or cured in season, bronchitis not unfrequently leads to diseases of the lungs. As will be observed in Fig. 89, the bronchial tubes are extensively distributed in the lungs for the

Fig. 89.



THE BRONCHIAL TUBES AND RIGHT LUNG.

a, the windpipe—*b*, its division into bronchial tubes—*e e e*, their ramifications in the left lung, which has only two lobes—*c c c*, the three lobes of the right lung.

purpose of conducting the air to the vesicles, and when inflammation exists in the former, it is very easy for it to extend to the latter.

Every person has doubtless noticed how inflammation in the finger or hand, produced by soreness or accidental causes, will frequently communicate to the arm, and gradually extend toward the shoulder until the whole arm becomes affected. Now the bronchial tubes are as closely allied to the lungs as the hand to the arm, and the inflammation affecting one, will very soon affect both unless timely attended to.

Bronchitis is often mistaken for consumption. It sometimes presents all the symptoms of lung disease, so much so, that physicians not familiar with pulmonary diseases diagnose it incorrectly, much to the discomfort of the patient. There is one rule, however, which in most cases is reliable for non-professionals to go by. Invalids affected with bronchitis are apt to be easily discouraged, and at times depressed, while the consumptive is almost always hopeful. The hopefulness of consumptive patients is proverbial—they are seldom disposed to believe that they have the disease, while those affected with throat or bronchial affections are nearly always apprehensive, hypochondriacal, and disposed to imagine themselves the victims of consumption.

Persons affected with bronchitis should, as much as possible, avoid coughing. It is sometimes difficult to do so, but coughing tends to extend the disease. It is a kind of involuntary effort of nature to ease the irritation. All persons who have ever had an itching eruption of the skin, know how natural it is to scratch. People will scratch when they do not think of it. In this case it seems to be an involuntary movement to ease the irritation, but it generally makes it worse, and the humor and redness of the cuticle spreads over more surface in consequence of it. The same in coughing: the mucous membrane, instead of the surface skin, being irritable, and the seat of annoyance being unapproachable with the hands or fingers, a sudden discharge of air from the lungs is resorted to, the friction of which administers temporary relief, but as certainly increases the latitude of the disease. For this reason coughing should be suppressed so far as practicable, and bronchitis should not be neglected. It is consumption in embryo, and many times as obstinate to cure as a deeply-seated pulmonary disease.

There is no one habit better calculated to bring on bronchitis and to perpetuate it than the habit of bundling up the throat. By this practice the throat is rendered tender and sensitive, and susceptible

to colds on the slightest exposure. My personal experience in this connection may be interesting. When a boy I was constantly afflicted with this disease, and falling into the error that most people do who are troubled with the complaint, I never stepped out of doors without winding a great woolen comforter two or three times around my neck. One doctor after another was applied to—one dosing me with calomel; another advising the application of gargles; and another swabbing my throat with nitrate of silver, until I was nearly doctored into my grave. As I became older, and began to exercise my own judgment, I resorted to simpler remedies of my own invention with partial relief, still continuing, however, the injurious practice of enveloping my neck in woolen; but at the age of about fourteen I determined to make my neck tough like my face, and not only throw off the neck-dressing customary in cold weather, but also the cravat, and turn down my collar on a level with the collar-bone. At once the difficulty was improved, and, by the aid of medication to purify the blood, every vestige of the disease departed. I have so far back-slidden as to resume the neckcloth, but in no case is it my habit to wear fur, tippet, or other extra clothing about the neck in winter. No one in the habit of bundling his throat can at all times avoid exposure when the neck is not guarded. The atmosphere indoors is sometimes as cold as that outside, and he who envelops his throat to his ears in furs, or woolen, on stepping out, must keep them on after returning, or a cold will be the result.

If neckcloths are to be discarded in winter, of course it should be done gradually, and the neck should be bathed every morning in cold water. Exposed to the air, the neck becomes no more sensitive than the face or hands, and who with any frequency takes cold in the latter?

Let me not, however, be understood to say that the abandonment of neckcloths will effect a cure in cases of bronchitis. The exposure of the neck toughens it, and renders it less liable to attacks of cold, as previously remarked, and in this way victims of bronchitis may be benefited without other treatment.

Cases of bleeding bronchitis sometimes present themselves in an extensive practice. In some of these their difficulty has been mistaken for hemoptysis or bleeding of the lungs. A case of this kind some years ago visited me from New England, and it was generally supposed by his physicians that he was affected with hemorrhage of

the pulmonary organs, but I was convinced after an examination, that the blood proceeded from a certain portion of the bronchia which I pointed out, and proceeding upon this diagnosis, I cured my patient after he had been given up to die by his doctors at home. The treatment of bronchitis, to be successful, must be about the same as in a case of consumption.

Asthma

Has generally been regarded as incurable by doctors of all schools, and the results attending their treatment of the complaint strikingly corroborate the opinion they hold. Incorrect views concerning the true pathology of the disease, are the foundation of their ill success in treating it. "To know a disease is more than half its cure."

A popular hydropathic physician gives expression to his own and others' inability to determine the nature of the disease in the following language:—

"If I were to declare my utter ignorance of the nature and cause of this disease, I should follow the example of most medical writers. Its symptoms are apparent enough, its diagnosis is easy, but all the rest is very much in the dark. Webster's Dictionary may seem a strange place to look for the description of a disease, but it is not a bad one, when you want it brief and comprehensive. The old doctor of laws probably consulted some dozens of doctors of medicine before he wrote down the following:—

"'Asthma, a chronic, paroxysmal, and intermittent disease of respiration; the paroxysms exacerbating and remitting; the inspirations, during the attack, fuller and more frequent than natural, but with a sensation of want of air, accompanied by paleness of the skin and lividness of the lips. The term is also often applied to any difficulty of breathing.'

"It would be difficult to find a better description of this disease, so far as its phenomena and symptoms are concerned; but its absolute nature is untouched. It is called spasmodic; but where are the spasms? are they in the muscles of the chest, the diaphragm, the bronchia, the trachea, the larynx, or where? Dr. Webster does not inform us. Let us turn to Professor Dickson, a very careful and highly respectable authority.

"'The pathology of asthma,' says Professor Dickson, 'is difficult and obscure. The difficulty of breathing is twofold, and urges both

during expiration and inspiration. It is hence plausibly suggested, either that the muscular fibres of the bronchia are everywhere rigid, refusing both to contract and to dilate; or, that in some portions of the air-tubes, these fibres are spasmodically contracted, resisting both the entrance and exit of air.' "

It may sound boastful, but I feel compelled to say that I have not found asthma such a puzzling conundrum. We meet with two varieties of the disease, namely:—humid or catarrhal, and dry or inflammatory. In the former there is usually an excessive secretion of mucus; in the latter, none. *In the first form the muscular fibres of the bronchia and air-vesicles are relaxed and do not contract; in the last they are contracted and refuse dilation.* Hence expiration is difficult in one case, and inspiration in the other, both of which forms produce the same result, namely: difficult breathing. The plausibility of this theory is sustained not only by the symptoms exhibited, but by the following well-known facts: when the mucous membrane is in that condition which promotes excessive secretion and expectoration, it is relaxed or flabby; when it is affected by acute inflammation and dryness, the fibres of this membrane are contracted.

The foregoing simply presents the immediate causes. Let us look at the predisposing causes: In humid asthma the invalid is in a slightly negative condition compared with the atmosphere, in consequence of which the fluids migrate to the mucous membrane; in dry asthma, in a condition too positive, by which electrical radiation and the movement of the fluids to the surface is excessive (see page 99). The two forms are consequently antipodes, and a climate which is congenial to one is aggravating to the other. A damp and excessively electrical atmosphere, for a person troubled with humid catarrhal asthma, augments the severity of his complaint, while one troubled with the dry form, finds his difficulty less troublesome, if not entirely relieved in damp or rainy weather, or in a climate generally humid. On the contrary, the invalid with humid or catarrhal asthma is seldom affected with paroxysms in dry weather, or in a bracing atmosphere, and removal to a climate peculiarly dry often proves a cure. In fact, humid and dry asthma are two distinct diseases as unlike as consumption and intermittent fever, and require entirely different treatment. The notion of one patient that a dry atmosphere suits him best, and of another that a damp air seems

more congenial to his system, have been regarded unaccountable, or charged to the imagination of the sufferer by the doctor, who in some cases tells his patient he is nervous and whimsical. With these incorrect views regarding the pathology of asthma, one form of the disease is often treated with the same remedies employed for the other. It is not strange, therefore, that asthma is regarded as incurable by old-school practitioners, and by many of the new school.

Asthma invariably results from derangements of the blood and nervous disturbances, by which there is too little or too much electricity generated in the system: in the first instance producing an excess of the alkaline fluids by a partial stoppage of electrical radiation; and in the last producing dryness of the mucous membrane and lining of the respiratory apparatus by an unhealthful augmentation of the electrical radiation of the fluids. It is plain, therefore, that to effect a cure a patient must give due attention to his blood, and either seek a climate congenial to his abnormally electrical condition, or have such medical treatment as will change it and render it healthfully conformable to the atmosphere in which he lives. The diet of asthmatic invalids should also be carefully looked to. In humid asthma a stimulating animal diet may be resorted to; in dry, a light vegetable diet.

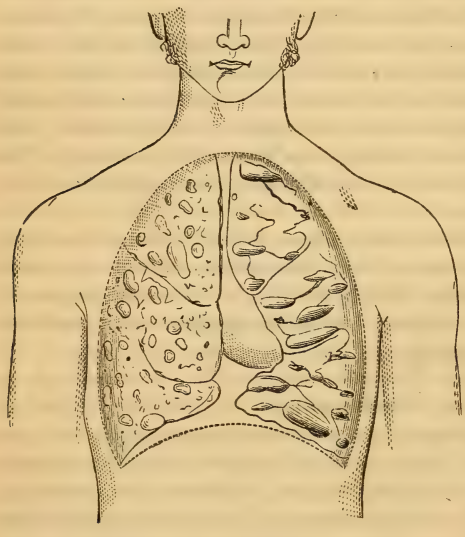
The author has no recollection of ever failing in a case of asthma when the patient was under fifty years of age, while he has been successful in many on the shady side of fifty. The combination of electricity and medicine seems admirably adapted to the requirements of asthmatic patients, and must almost invariably succeed.

Consumption.

We now come to an affection of the respiratory organs which is indeed serious. There is a terror in the name! Published statistics show that one-fourth of all the deaths occurring in North America, France, and England, when no wide-spread epidemic prevails, are caused by diseases of the lungs. Make no account of infant mortality and the percentage is still larger. Is this mortality among consumptives inevitable? Is consumption, indeed, an incurable disease? The results of enlightened new-school practice, it seems to me, prove otherwise. There is only a handful of doctors, comparatively, on either continent, who know how to treat consumption.

Nearly all educated physicians are perfectly acquainted with the disease as it is *locally* presented. One of the best descriptions of tubercle in its incipient and progressive stages is given in the "American Cyclopædia." "In the earliest stages the tubercular matter," remarks the writer, "presents itself in one of two forms: first as small, rounded, semi-transparent granulations, of a grayish color, varying in size from a millet seed to a pea, disseminated throughout the affected portion of the lungs; in the progress of the disease a yellow spot is formed in the centre of the grayish matter, and this gradually increases until the whole becomes of a uniform color; second, the grayish matter is infiltrated into the substance of the lungs in irregular masses; the yellowish points make their appearance in these masses, increase and coalesce, until the whole forms irregularly round bodies, varying in size from a pea to a hen's egg, more or less soft and friable, breaking down like cheese under the pressure of the fingers. After a time these yellow bodies undergo a new transformation; they begin to soften in the centre, and gradually become converted into a thick, yellowish fluid or semi-fluid matter. The abscesses containing this matter are termed vomicæ; by degrees their contents find their way into the bronchial tubes, and are expectorated, leaving ragged, irregular cavities in the lungs. These cavities when first formed are rounded, rarely entirely emptied, and are commonly lined by a delicate false membrane; old cavities are irregular in their form.

Fig. 90.



TUBERCULOUS AND ULCERATED LUNGS.

presenting anfractuosities, and are commonly lined with a dense false membrane, while their walls and the neighboring pulmonary tissue are infiltrated with tubercle. The mucous membrane lining the bronchial tubes which are connected with old cavities, is almost invariably inflamed and thickened. In a certain number of cases the trachea presents ulcerations varying in size and number; the larynx is more rarely affected, and here the ulcerations are mosly confined to the vocal chords and the epiglottis."

The symptoms of consumption the doctors mainly agree upon. They are, briefly: wasting of the flesh; more or less cough in most cases; shortness of breath; expectoration of matter which falls below the surface of water, or sinks to the bottom, and, in some cases, streaked with blood; growing contraction of the chest; quick pulse; dry heat in the palms of the hands and soles of the feet; flushes at times on the cheeks; gradually increasing debility; and, in advanced stages of the disease, hectic fever; chills; copious expectoration, in some cases with, and in others without blood; night sweats; eyes sunken and glassy; cheeks hollow; lips compressed; nose pinched in its appearance; complexion bloodless when fever is absent; and, in the last stages, great emaciation; swelling of the extremities; expectoration ash-colored and heavy; relaxation of the bowels; disturbed digestion; and, in many cases, ulceration of the mouth and throat. Some cases pass through all of these stages with little or no cough, or pain in chest; but usually at the outset there is a hacking cough, which gradually increases as the disease progresses, both in severity and frequency; and weakness, pain, and constriction of the chest experienced.

What are tubercles? Without wasting time and space with an investigation of old-fogy theories as held by a majority of medical writers, I shall denominate them *inverted eruptions;* or, in other words, they consist of the presence of humors in the delicate substance of the lungs, and in the lining of the air-vesicles, instead of the external skin. This view is sustained by the experience of hundreds who have been my patients with tuberculous difficulties, and whose pulmonary attacks dated with the disappearance of humors, or ulcers, from the cuticle. Once I had a case whose lung trouble commenced immediately after a suppurating ulcer on the knee had been healed up; others were taken with consumptive symptoms when salt-rheum, with which they had been for years troubled, left

the external skin; still others, whose lungs became affected immediately on the disappearance of an external humor from the chest. In these cases their family physicians had pronounced their diseases tuberculous consumption. Before effecting a cure, in many of them the cutaneous difficulty reappeared, and as soon as it did so the lungs were perceptibly relieved.

Many persons, it is true, have tuberculous lungs who have never had a blotch or pimple on the skin. In these cases the humors in the blood seem predisposed to attack the mucous membrane rather than the cuticle. Many invalids think their blood pure, because they have ever been free from any external signs of humors. Such persons, if affected with blood-impurities, have the most to fear from tubercles and ulcers in the lungs, because of the persistency of the blood to deposit its impurities on the internal linings.

In all cases where consumption is a family disease, it will be discovered on investigation that scrofulous impurities are the cause. What I mean by family disease, is, when any affection is prevalent in a family, and usually the cause of the death of its members. In some cases consumption sweeps off a whole family. In others, it picks them out here and there, a mother, a daughter, an uncle, a cousin, etc.; while other members of the family may appear quite well, or be affected with other local difficulties quite different in their character; but in both instances given, the physician should look for a scrofulous taint, and he will in a majority of cases find it.

Treatment of Chronic Diseases of the Breathing Organs.—In all of these difficulties excepting asthma (and in many cases this affection may be included), the main thing to be accomplished is to purify, enrich, and build up the corpuscles of the blood. In all cases of catarrh, inflammations or ulcerations of the throat, bronchitis, and consumption, the blood, on examination, is found to be inflammatory and impure, or else deficient of red corpuscles, while all the substantial constituents of the blood exhibit a disposition to decay. I am constantly treating, and with gratifying success, invalids affected with the diseases under consideration, as will be observed in some extracts of letters given in Chapter XIII. of this part, and the remedies I employ are such as are calculated to restore the blood to its wonted richness and strength, and impart nervous vitality to the wasted and enervated system.

It is held by many that the cause of this disease is an abortive or

perverted nutrition, tubercle being produced instead of true tissue, and that the faulty nutrition, which results in tubercle, is caused by a deficiency of oily substances! On the strength of this presumption, Dr. Hughes Bennett, some years ago, introduced cod-liver oil as a remedy. If there is nothing better to sustain the correctness of this theory than the results of the remedy employed, no argument is required to exhibit its fallacy. Cod-liver oil has been extensively resorted to by the medical profession in this country and Europe, for the past twenty or twenty-five years, and with what success, the public is too well aware to make statistics necessary. That oleaginous food and remedies are good, provided the patient is not dyspeptic as well as consumptive, there can be no doubt, because they furnish nutriment to the failing adipose tissue. But that cod-liver oil leads all other oleaginous remedies, facts thus far fail to demonstrate.

A good story is related by a Pennsylvania paper of a German, residing in York City, in that State, who recently, while suffering from pulmonary attack, sent for one of the village doctors. In a short time the doctor called on him, prescribed two bottles of cod-liver oil, and receiving his fee of $8, was told by the German, who disliked the size of the bill, that he need not come again. The German, who, by the by, had not heard the doctor's prescription very well, supposed he could get the oil and treat himself. The doctor saw no more of his patient for some time; but one day, riding past the residence of the German, he was pleased to see him out in the garden digging lustily. The case seemed such a proof of the virtues of cod-liver that he stopped to make more particular inquiries about it. "You seem to be getting well," said he to the German. "Yaw, I ish well." "You took as much oil as I told you," queried the doctor. "Oh, yaw, I have used more as four gallons of the dog-liver oil." "The what?" queried the astonished doctor. "De dog-liver oil dat you said I shall take. I have killed most every fat little dog I could catch, and the dog-liver oil has cured me. It is a great medicine, that dog-liver oil!" The doctor had nothing to say, but rode quickly away, and noted in his memorandum-book that consumption might be as readily cured with dog-liver as cod-liver oil. He might also have added in his diary that lamp-oil is as good as cod-liver oil. While in New Bedford (from which port a great number of whaling vessels are annually fitted out) some years ago, I was informed by some of the captains (they are all captains there!) that immense

quantities of pure sperm-oil were annually supplied to druggists throughout the United States for the cod-liver oil trade! There is a very simple process by which any one may determine whether any sample of cod-liver oil is genuine or not, and for those who are disposed to make use of cod-liver oil I will give it. Add nitric acid to the oil. If it is pure, the color will be changed to a delicate carmine red. If it be impure, or adulterated with whale oil, or other animal fats, the color produced by adding the acid will be a brown or dirty red. In making the test, after adding the acid, agitate the mixture a little.

Without resorting to any obnoxious oils like those just mentioned, any consumptive patient can obtain all the oleaginous matter necessary to supply the waste of his system, by eating those articles of wholesome food like roast and boiled beef, and boiled mutton, while his medication should be such as to deprive his blood of its impurities.

Dyspepsia is a very common companion of diseased lungs, and in such cases cod-liver oil, or even fat meats, are loathsome to the stomach. Dr. Pereira remarks that "fixed oil or fat is more difficult of digestion and more obnoxious to the stomach than any other alimentary principle." "Indeed," adds he, "in some more or less obvious or concealed form, I believe it will be found the offending ingredient in nine-tenths of the dishes which disturb weak stomachs." Here, then, cod-liver oil not only ceases to be a remedy, but becomes an injurious medicine. What are cod-liver oil doctors going to do in such an extremity?

I have a suggestion which may help them out a little. It is to apply the oil externally with the friction of the hand. Any wholesome oil may be employed for this purpose, and the frequency of the application must depend upon the condition of the patient. If he be greatly emaciated, every other day would not be too frequent, but the skin should be well frictionized with the naked hand, and the person making the application should be one in the full vigor of health. Any oily matter remaining after this application may be removed with a dry napkin.

Fresh air is an indispensable aid in curing consumption. "It is wonderful," remarks Dr. Hall, "how afraid consumptive people are of fresh air, the very thing that would cure them, the only obstacle to a cure being that they do not get enough of it; and yet what infi-

nite pains they take to avoid breathing it, especially if it is cold, when it is known that the colder the air is the purer it must be; yet if people cannot get to a hot climate, they will make an artificial one, and imprison themselves for a whole winter in a warm room, with a temperature not varying ten degrees in six months; all such people die, and yet we follow in their footsteps. If I were seriously ill of consumption, I would live out of doors day and night, except it was raining or mid-winter, then I would sleep in an unplastered log-house."

It is quite common for the faculty to recommend consumptive invalids to go South, after they have made some good round fees out of them! Probably this is because they want to get them off their list of patients. They get tired of hearing them say—"I'm no better, doctor." Cold air is just as good for consumptives as warm, provided it is *dry*. This is the important consideration. There is almost invariably an excess of mucus in lung diseases, which causes profuse expectoration. A dry and negative atmosphere excites active electrical radiation from the system, which carries off the internal moisture, rendering the mucous membrane less relaxed and the mucous secretions less copious. I would sooner go to Maine than to Florida if I had tuberculous lungs, although I would advise patients to go where they please, only taking care to avoid damp localities.

"A change of climate," a newspaper writer remarks, "has been commonly believed to be beneficial to the person suffering with consumption. Sir James Clark, of England, has, however, assailed the doctrine with considerable earnestness, and a French physician, M. Carrière, has written against it; but the most vigorous opponent of it is a Dr. Burgess, of Scotland. He contends that climate has little or nothing to do with the cure of consumption, and that, if it had, the curative effects would be produced through the skin, and not through the lungs. That a warm climate is not of itself beneficial, he shows from the fact that the disease exists in all latitudes. In India or Africa, tropical climates, it is as frequent as in Europe and North America. At Malta, right in the heart of the genial Mediterranean, the army reports of England show that one-third of the deaths among the soldiers are by consumption. At Nice, a favorite resort of English invalids, especially those affected with lung complaints, there are more native-born persons die of consumption than in any English town of equal population. In Geneva this disease is almost equally prevalent."

Notwithstanding, however, the opinions of Clark, Carrière, and Burgess, the results of my observation lead me to decide that change of scene and climate is good for consumptives. The real mistake is to depend upon any particular temperature of climate for restoration. If the patient travel through *various* localities, his system will gather up those properties of which it is deficient. If he lack iron, breathing the air, and drinking the water of a section where iron is largely produced, will of course benefit him. If lime be deficient in his system, the air and water of limestone countries will prove useful. For almost all cases of pulmonary disease, breathing the atmosphere of a pine region administers to the diseased mucous membrane a balsamic property which is beneficial. In this particular Dr. Burgess is wrong. The lungs and skin both take in what the system hankers after. You have only to place a diseased body in a position to come in contact with what it wants, and the *vis medicatrix naturæ* will take it in and use it, just as a dry sponge will absorb water. The South, however, is no better than many northern climates. Some parts of Wisconsin are said to have superior climate for lung diseases. I have been told that horses with heaves, soon recover when driven to the central part of that State. Minnesota, too, has been highly recommended, and I have known of some cases visiting that State with benefit. It may be put down as a pretty good rule that persons living on the sea-shore, affected with pulmonary difficulties, may be benefited by a visit to Wisconsin, or Minnesota, or to some mountains in the interior; while those who have been accustomed to an inland climate may visit the sea-shore to advantage; but the theory that tropical climates favor the recovery of pulmonary invalids, is entirely exploded. The soil of Key West is enriched with the bones of deceased consumptives.

People of a pulmonary diathesis, living on the northern and western slopes of mountains, may sometimes avoid the development of the disease, and when it actually exists, may be invariably benefited by seeking southern and eastern slopes. A proper understanding of this proposition may be obtained from a perusal of the essay, "Sunshine," commencing on page 259. Inasmuch, however, as the subject introduced in this paragraph is a most important one, as verified by my own experience in the treatment of pulmonary disease, and also by the observation of others, I wish to present here an extract of an interesting letter written in 1858, by the Rev.

Theodore Parker, to Dr. Bowditch. He had promised Dr. B., to write the result of some of his observations on consumption, and it was in fulfillment of this promise that the letter was written. The matter quoted may be found in the appendix to John Weiss's Life and Correspondence of Theodore Parker.

"I will begin," says Mr. Parker, "with the consumptive history of a single family which I will call the P.'s.

"1st P. came to this country in 1634, and died 1690, aged eighty-one, leaving many sons and daughters. He had no consumption.

"2d P., his son, died aged eighty-six, leaving also many sons and daughters, and no consumption.

"3d P., the son of the preceding, born 1664, at the family seat, in 1709 moved to another new settlement, and built him a great house which was thus situated: on the *south-east slope** of a large range of hills, screened from the north and west winds, but open to the south and south-east; all the hills were heavily timbered, chiefly with oak, hickory, and pine. To the north-east, at the distance of some miles, hills of small elevation; these also, thickly covered with woods, shut out the sharp cold wind from that quarter.

"The ground about the house, above it and below, was then wet, springy, and spongy, in consequence of the great woods on the hills; the culture and drainage have since remedied that evil.

"But about fifty rods from the house, and perhaps sixty feet below it, there began a great fresh meadow of spongy peat, from two to fifteen feet in depth. This meadow, with its ramifications and spongy adjuncts, reaching up the hill-sides in various places, and filling the wooded ravines, would contain, say, perhaps, two or three hundred acres.

"It was always wet all the year through; its neighborhood damp and chilly, especially toward evening; fogs could often be seen gathering there toward night of a clear day.

"P. died at the age of eighty-two, with no sign of consumption in him, or his family, or their paternal or maternal ancestors.

"4th P., son of the preceding, was born before his father removed to L——; but attended him in that removal, and died at the age of ——, leaving many sons and daughters, still with no signs of consumption. He inherited his father's house, and his children were born in or near it.

* Mark this—*south-east slope.*

"5th P., son of the preceding, and in the same house, married a Miss S., who was descended from a similar family, which had lived for a hundred or a hundred and fifty years in a similar situation, a mile and a half off, where the house stood on the *north-west side of a hill*,* and near a similar range of wet, spongy meadow, though less in depth and extent. Hitherto consumption had appeared in neither the P.'s nor the S.'s.

"P. had eleven children, and himself died a hale old man at seventy-seven; but his wife had passed away from him by consumption at about the age of sixty. Of his children, eight died of consumption, two of them between sixteen and nineteen; the rest were married, and attained various ages from twenty-five to forty-nine. Only two of his children are now living: one sixty, with no sign of pulmonary disease; the other forty-eight, I hope equally free from the family taint.

"Two of the grandchildren of P. have also died of consumption. One son of P. moved from the family homestead, and settled on the piece of wet, spongy land, exposed to the bleakest *west*, *north*, *and north*-east winds.

"He had six children, all of whom died of consumption between twenty and twenty-four. The parents soon followed, dying of a broken heart.

"Early branches of the P. family who were settled in dry and sound localities, remain to this day, I think, free from that malady.

"Another large family, settled in the neighborhood of the same great meadow for, perhaps, the same length of time has been consumptive for two generations, though many of them have removed to better situations, or were even born therein.

"The S. family in the generation I spoke of consisted of ten sons and two daughters.

"Both daughters died of consumption, but I think none of the sons, though the daughters of the sons and several of their male children who grew up *temperate* did. One of the daughters married P.; the other one married a strong, hearty man of enormous stature, with no tendency to any specific disease. She had four sons, one intemperate, who is now fifty-five years old and well; three temperate, all settled in healthy places, and at wholesome business, and all died of consumption between twenty and twenty-five.

* Mark this—*north-west slope.*

"Hence," continues Mr. Parker, "I draw carefully these inferences:—

"1st. That the healthiest of families, living in such a situation as I have described, generation after generation, acquire the consumptive disposition, and so die thereof.*

"2d. That it sometimes requires several generations to attain this result.

"3d. That members of the family born with this consumptive disposition often perish thereby, though they live and are even born in healthy localities.

"4th. Intemperate habits (when the man drinks a pure, though coarse and fiery liquor, like New England rum) tend to check the consumptive tendency, though the drunkard who himself escapes its consequences, may transmit the fatal seed to his children.

"In addition to what I have already mentioned, here are two striking cases:—

"1. I know a consumptive family living in a situation like that I have mentioned, for perhaps the same length of time, who had four sons. Two of them were often drunk, and always intemperate, one of them as long as I can remember; both consumptive in early life, but now both hearty men from sixty to seventy. The two others were temperate, one drinking moderately, the other but occasionally. They both died of consumption, the oldest not over forty-five.

"2. Another consumptive family in such a situation as has been already described, had many sons and several daughters. The daughters were all temperate, married, settled elsewhere, had children, died of consumption, bequeathing it also to their posterity. But five of the sons whom I knew were drunkards, some of the extremest description; they all had the consumptive build, and in early life showed signs of the disease, but none of them died of it; some of them are still burning in rum. There was one brother temperate, a farmer living in the healthiest situation. But I was told he died some years ago of consumption."

This letter of Mr. Parker's illustrates two facts, namely: the value of a healthful location, and the benefits which may be derived in some cases from the use of alcoholic stimulants. As the reader will

* There is no evidence given in Mr. Parker's letter, of consumption having been produced in any situation described, excepting the ones he speaks of as located on the "north-west or north-east side of a hill."

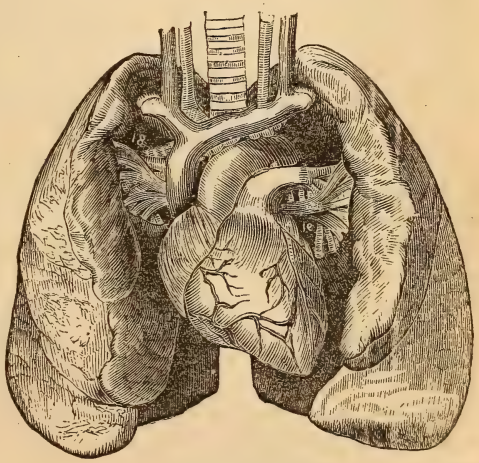
observe, Mr. Parker evidently intended to call attention to the effects of that peat meadow; but by analyzing the facts as presented, it will be observed that the P—— family, so long as they remained on the south-eastern slope, were healthy, but when one of them came to marry into another family on t' e north-western slope and reside there, consumption presented itself. The presence of this damp meadow was undoubtedly prejudicial to both slopes, but it will readily be perceived how, with surroundings no more prejudicial to one slope than the other, consumption was not developed on the south-eastern, but was produced on the north-western slope. So far as the influence of liquor is concerned in preventing the development of pulmonary disease, as Mr. P—— was personally a total abstainer and a zealous advocate of temperance reform, what is said about the effects of New England rum upon families of a consumptive tendency, cannot be attributed to any personal predilections in favor of rum drinking. The precise way in which alcoholic stimulus affects favorably a person of scrofulous or consumptive tendency, is explained in what I have presented on Vinous and Distilled Liquors commencing near the close of page 81. Many physicians, however, depend too greatly upon this treatment. I have had many consumptive invalids come to me, who, without a moment to spare in the adoption of some thorough and skillful treatment, were mainly depending upon Bourbon whiskey and cream, which had been recommended by their physicians. In some cases they were absolutely using nothing else!

Many consumptive invalids are especially alarmed when hemorrhage occurs. This fear is not well-founded. Men often survive even the severest accidents to the lungs, and live to a good old age. The old Indian chief, O'Brien Skadogh, received, during the Revolutionary war, a bayonet wound in the right lung while fighting under General La Fayette. Not many years ago he was a strong, erect, and lofty man of 104 years! General Shields received a severe wound in one of his lungs in the Mexican war, and entirely recovered. During the great rebellion, cases came under my own observation, where soldiers were absolutely shot through the lungs, and still lived. If such lacerations can be survived when nature is attacked without warning, there is certainly every chance to cure bleeding lungs, gradually induced by disease, when nature is watching the affected parts and assisting every good remedy employed for mending a breach.

It is not a little curious that the pulmonary artery and vein, when approached by tubercles, contract and sometimes fill up with a fibrous substance, so as to prevent or stop hemorrhage. But when the bayonet, the sword, or the bullet suddenly pierces any part of the lungs, nature for the moment is overpowered, and it is almost surprising how she ever recovers herself in season to heal the wounded part. When, therefore, nature exhibits such miraculous power to save lacerated lungs, let not the consumptive despond because, perchance, he raises blood. My success, and that of many others who have given much attention to affections of the lungs, has established the possibility of curing pulmonary hemorrhage, whether induced by tubercle or suppressed menstruation.

The entire destruction of one lung by tubercles or ulceration need not excite serious apprehension, if the invalid is so situated as to be able to avail himself of superior medical skill. Persons often live to a good old age with only one lung. I have observed in cases of this kind which I have treated, that, after the progress of the disease has been stopped and the tubercles of the remaining lung removed, the latter gradually expands and sometimes almost fills the cavity created by the one which has decayed or dried up. I have now in my mind one case, in particular, illustrative of this remark: a lady, whose case was given up as hopeless by a score or more of physicians, but who has been kindly spared to her husband and children through the instrumentality of my treatment. In her case the left lung had been entirely consumed, and the

Fig. 91.



LUNGS AND HEART.

destructive disease had made considerable inroad on her right lung. The last examination which I had the pleasure of making showed that the right lung had so expanded as to fill nearly one-half the cavity occasioned by the destruction of the left. The reason of this is obvious. The right lung having to perform the same amount of labor intended for two, the air-vesicles by degrees enlarged, and with their expansion the lobes extended their increased dimensions into the vacant chamber of the left chest.

Accounts are given in the records of some of the French hospitals, of old people who have died of other than pulmonary diseases, and whose chests on being opened, exhibited the fact that they had lived many years with only one lung. Healed cavities have also been found in the lungs of such subjects, showing that either nature or the physician had cured them of consumption. President Jeremiah Day, of Yale College, during his early life was interrupted in his studies by lung disease and alarming pulmonary hemorrhage, but he lived to the age of 95 years! "An autopsy revealed the existence of cicatrices or scars of former ulcers in the upper part of both lungs, showing that extensive consumptive disease had existed more than sixty years before, the recovery from which had been complete." "Here, then," says Dr. Hubbard, in a paper read before the annual convention of the Connecticut Medical Society, "was all that remained to mark the beginning, progress, and cure of a case of tubercular consumption, occupying *twelve years* in its period of activity, and with its incipient stage dating back more than *three-quarters of a century*. A legible record, surpassing in interest and importance to the human race those of the slabs of Nineveh, or the Runic inscriptions."

It will be observed that President Day was affected with ulcers in both lungs. Many times only the right lung is attacked. When this is the case a cure is comparatively easy, because the right one has three lobes as exhibited in Fig. 89. One of these may be obliterated by disease without serious harm to the invalid, while the loss of one of the left lobes can hardly be afforded.

Cheerfulness and freedom from mental excitement are essential to the recovery of a consumptive patient. This fact becomes apparent when the philosophy of respiration is explained. It is held by all medical writers whose books I have read, that respiration is wholly produced by the upward and downward motion of the diaphragm

which divides the stomach from the lungs. This is only true in part. Besides the movements of the diaphragm, I am convinced by experiments, that the air-vesicles, permeated as they are by minute nerves, have a contractive and expansive power in themselves, so that when the diaphragm is in any way disabled or prevented from performing its functions freely, the lungs can in a measure supply themselves with air. The unprofessional reader must understand that the lungs are not expanded by the air entering into them. The diaphragm falls and the air-vesicles are opened by the same electric force which is employed by the brain in producing the pulsations of the heart. A vacuum created, and the air rushes in—this is the act of inhaling. The diaphragm contracted and drawn up, and the vesicles closed by the electric force acting on the nerves ramifying through these organs, and the air is expelled—this is exhaling.

Were the human system wholly dependent upon the upward and downward movement of the diaphragm for respiration, women who compress their chests with corsets, and other close-fitting garments, would be unable to breathe at all. It is true that such foolish people breathe but little, and that the air penetrates only the upper portion of the lungs. But what little air they do inhale is chiefly obtained by the expansion of the air vesicles, nearly or quite independent of the movements of the diaphragm, which becomes literally paralyzed.

The action of the nervo-electric forces on the nerves ramifying through the respiratory organs, being the motive power which keeps them in motion, and the brain being the reservoir from which the nervo-electric forces are derived, the reader can readily perceive how necessary is tranquillity of mind for the promotion of convalescence in the consumptive, and also how pulmonary difficulties may be induced by grief and trouble.

Partial paralysis of the lungs may occur when the mind is excessively harassed. I have had many cases of this kind, and have found electricity of the greatest value in treating it. Electricity is also good to open up a communication between the brain and respiratory organs, when humors of the blood have collected about the nerves connecting the two, and almost intercepted the motive power. Where there are interruptions of this kind, electricity makes up in quantity what it lacks in intensity. Vital electricity is undoubtedly more intense than any which can be artificially produced; but as

quantity can be obtained to any desirable extent by various electrical contrivances, it often surpasses intensity in effectiveness.

In all cases of affection of the lungs the blood must be properly attended to. As intimated in various portions of this essay, almost all the diseases of these organs arise from impurities of the vascular fluids. It is for this reason that inhalants should not be depended upon to the exclusion of other remedies. There are physicians who treat pulmonary diseases exclusively with remedies to be inhaled. Their success is in no instance permanent, excepting in those cases wherein the affection had been induced by simply an inflammatory condition of the blood. The inflammation subsiding, and the irritated mucous membrane healed by the inhalants, a cure in this way may have been possible. The value of inhalants is not for a moment to be questioned. They must in nearly all cases be employed to some extent, but to rely upon them exclusively is almost as absurd as to stake the life of the patient upon the success of whiskey and cream. What I have said, commencing on page 313, on the subject of inhalation, may be interesting to the consumptive reader.

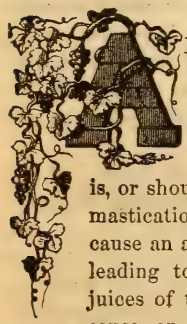
With the advancement which has been made by a few independent medical men in the treatment of consumption, no one suffering with this disease should for a moment entertain the idea that his or her case is hopeless. The popular systems of drugging have of course proved futile, and because you have failed to receive relief at the hands of your family physician, or from the use of some popular panacea, you may settle down into the belief that your disease is beyond the reach of human skill. From this despondency, rally, I pray you. Waste no time in uncertain experiments, but place your case in the hands of some physician who devotes his exclusive attention to the treatment of chronic diseases. Many years ago in northern Vermont a well-known merchant was stretched upon a bed in the last stages of consumption, as was confidently supposed. The best physicians of his county had given him up, and celebrated medical skill of Montreal had been resorted to, but the wise men of the profession shook their heads. It was expected that he could not survive many days. In this hour of gloom, his devoted wife determining to make one more effort, sat down by the bedside of the sick man, and in a letter to the author presented the symptoms. Guided simply by this presentation of the case, I prepared and forwarded medicines which fortunately arrived in time. Immediately on taking

them, his strength revived, and so rapidly, that it treatment consisted of some strange and powerful stim. was gravely predicted by the doctors and neighbors, that a fatal reaction would soon follow. I was even blamed for the presumption of holding out any encouragement of cure in this hopeless case; but, to the happy disappointment of his friends, he steadily gained until he was restored to the family circle, his business avocations, and his former health. Although I had the pleasure of meeting this gentleman *after* his recovery, I have been instrumental in curing hundreds that I have never seen; one case, in the same section of country as the above, of hemorrhage of the lungs, which had also been pronounced hopeless by resident physicians. The case, indeed, was regarded as so far beyond the reach of medicine or other means of cure, that at the time he consulted me the doctors had ceased to prescribe; and he was simply keeping up on stimulants.

Whatever is done additionally, in every case of disease of the organs of respiration, whether of head, throat, bronchial tubes, or lungs, the main thing to be aimed at is the blood. Use all the adjunctive means which observation and experience approve, but do not neglect the important work of restoring strength and purity to that fluid which circulates through all parts of the system, and imparts to every organ the atoms it needs for preserving its wholeness and integrity. Auxiliary remedies may better be dispensed with than this one for the regeneration of the blood; but the wise and experienced physician, while he works with the main lever, will employ as many assisting ones as can be usefully adopted. In conclusion let me urge all who have perused the foregoing essays on diseases of the breathing organs, to turn to Chapter XIII., in this part, and read it attentively.

CHAPTER III.

CHRONIC DISEASES OF THE LIVER, STOMACH, AND BOWELS.

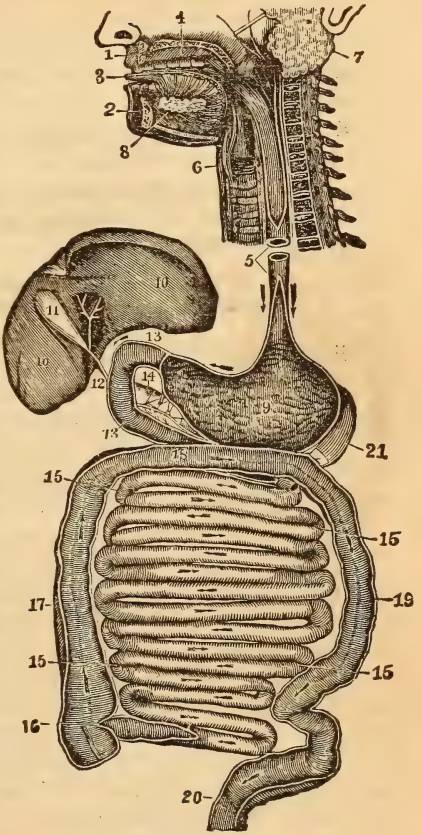


ALL of the organs named in the heading of this chapter are in some way accessory to the function of digestion. Let us examine, then, the process which food goes through to nourish and support animal life. First, it is taken into the mouth, and is, or should be, thoroughly mixed with the saliva, by proper mastication. This (the saliva) is electrically a negative, because an alkaline fluid. Descending the œsophagus, or canal leading to the stomach, it is precipitated into the gastric juices of the stomach, which are electrically a positive, because an acid fluid. Here, under the laws of electrical attraction, the gastric or positive fluid takes hold in earnest in penetrating and dissolving the particles of matter already permeated by the saliva or negative fluid. This process is further stimulated by the presence of nervous or electrical forces sent from the brain, through the pneumo-gastric nerves, which keep up a constant telegraphic communication between the brain and the stomach. (See page 28.) By the time the digestible portions of the food become dissolved, and well saturated with the gastric or positive fluid, it is next carried into the lower stomach, or duodenum. Here it meets with two fluids: one, the bile, sent by the liver through the gall-bladder and its duct; and the other, the pancreatic fluids furnished by the pancreas or sweetbread. Now the latter, like the saliva is strongly alkaline, or negative, and, inasmuch as that portion of the food which has been reduced to the finest pulp contains the greatest quantity of gastric or positive fluid, a combination at once takes place between them. Then the bile is slightly alkaline, or negative, while the indigestible portions of the food are only slightly saturated with the gastric or positive fluid, consequently these very naturally

coalesce under the laws of chemical or electrical attraction Fig. 92 will assist in giving a proper understanding of this explanation. Thus we see how the nutritious matter is separated from the innutritious or useless. Under the laws of electro-chemical attraction, marriages take place between inanimate as well as between animate bodies. The pancreatic fluids marry the nutritious, and the bile marries the innutritious. The former combination is sucked up by the absorbents to nourish the system, while the latter passes along down into the colon, where there is a sort of rendezvous for fecal matter. How well adapted the bile is to act as a consort must be seen when it is remembered that it is a soapy kind of fluid, well calculated to lubricate the fæces and make them pass easily through the intestines. The bile, too, gives the yellow color to the fecal discharges.

I have never seen in any medical work, nor have I ever heard, a philosophical description of the process

Fig. 92.



DIGESTIVE MACHINERY.

Figure 92 will give a correct understanding of the relative positions of the various organs of digestion. 1, upper jaw; 2, lower jaw; 3, tongue; 4, roof of mouth; 5, œsophagus; 6, trachea; 7, 8, salivary glands; 9, stomach; 10, 10, liver; 11, gall-bladder; 12, the duct which conveys the bile to the duodenum or lower stomach. The duodenum is represented by 13, 13; 14, pancreas; 15, 15, 15, 15, small intestines; 16, opening of the small intestines into the large intestine; 17, 18, 19, 20, large intestines; 21, spleen.

of digestion, and the separation of nutritious from innutritious matter. I presume the theory I have given will be new to all my readers, professional as well as non-professional; but when the chemical constituents of the bile and the pancreatic fluids are taken into consideration, together with those of the saliva and gastric juices, does it not perfectly accord with common sense? If so, and I think it does, it is eminently proper that the pages of this book should give birth to it, for the author of MEDICAL COMMON SENSE desires to make them the disseminators of original views, bearing the impress of self-evident truth.

Chronic Affections of the Liver.

The liver is the largest organ in the body, and is subject to a variety of chronic as well as acute disorders. The office of the liver is to suck up from the blood those properties which constitute bile and to send them to the duodenum to assist digestion, as explained in the foregoing essay, and then to the intestines to lubricate and soften the excrementitious matters, and conduct them through the serpentine intestinal canal.

The most common derangement to which the liver is subject is Torpidity. This is the result of nervous disturbances. Either the nervous forces are unequally distributed among the organs, or there is an insufficient supply of nervous vitality in the system. In either case, the liver lacks nervous stimulus, and the organ may be said to be partially paralyzed. Grief, fright, dissipation, or some bad habit, may produce an unequal distribution of the nervous forces among the different organs of the system. I often meet with cases wherein there is too great an expenditure of nervous force upon the heart, producing too rapid pulsations or palpitation, while the liver is almost deprived of it. Other organs may sometimes receive an excess at the expense of the liver.

When nervous debility exists, or when the patient is unconscious of any such debility, and his system does not contain its ordinary supply of nervous vitality, with which to keep the various vital organs active, Nature, ever disposed to avoid greater evils, is apt to withdraw a portion of the nervous stimuli from the liver. Why? Because no one of the other vital organs can be slighted with the same impunity. Partially deprive the heart of the nervous forces, and

its pulsations would become so feeble that death would soon ensue. Partially deprive the diaphragm and lungs of them, and respiration would become difficult. The patient would gradually die of suffocation. Partially deprive the kidneys of them, and the secretions of the urine would be retarded, speedily followed with dropsy or something worse. Digestion of food in the stomach must go on, however imperfect, or the system wastes for the want of nourishment, and nervous force must be supplied in abundance to stimulate the digestive process. In brief, the partial withdrawal of the nervous or electrical forces from any other vital organ than the liver would be followed with more dangerous consequences. Still, good old dame Nature, the common-sense nurse, will not deprive the liver of its due share of nervous stimuli, without giving notice at the same time to the invalid. She paints his face yellow with the bile which the liver fails to secrete from the blood. She constipates his bowels, and in some cases, to urge him on to give proper attention to himself, afflicts him with a painful and annoying difficulty in the rectum and anus called piles. While thus urging the invalid to give her means whereby to relieve the liver, she often gets insulted with a dose of calomel. She "asks for bread and gets a stone." But she graciously pockets the insult, knowing that it is the result of ignorance, and applies the nervous force, generated by the contact of the mercurial substance with the gastric juice or acid of the stomach, to the stimulation of the liver. The good old dame is then pestered to know how to get rid of the mercury, and, in some cases, allows it to attack some muscle, bone, or nerve, in order that the pain resulting therefrom may drive the victim to efforts to get rid of it.

Although torpid livers are found almost everywhere, they are more common in the South and newly-settled West than in any other localities in this country. I scarcely ever examine an invalid from the South, who has not a dead liver. My theory for this is, that in tropical latitudes, in consequence of the expansion of the air by heat, less oxygen by weight is inhaled, and that consequently there is not so much oxygen or electricity imparted to the system, through the medium of the lungs, as in colder climates, while, at the same time, the blood is less decarbonized, leaving more for the liver to do. Under such a climatic influence the system is apt to become deficient in nervous vitality, and overloaded with carbon, unless the habits of the people are good.

Proper attention to diet and other habits would, in a majority of cases, avert such a tendency; but our friends in hot climates like living up to the northern epicurean standard, and not unfrequently absolutely exceed it. Thus an excess of work is given to the liver by the use of too much carbonaceous food, and less nervous force is supplied by respiration to enable it to perform the labor. While, in the extreme north, barbarous epicures may glut their stomachs with the blubbers and skins of whales, putrid whales' tails, decayed seals, the entrails of the rypeau, mixed with fresh train-oils, etc., without serious consequences, those of southern latitudes should eat but little animal food, and particularly avoid rich gravies, and other aliments which fill the system with carbon. "Greasy matters," says a popular writer, "though composed mostly of waste, useless, and excrementitious materials, which have accumulated in the cellular repository because the process of alimentation was increased beyond that of elimination, are not strictly poisonous. They doubtless contain a very small quantity, yet very impure quality, of substances convertible into nutriment. But as food they are to be regarded *as next to venous blood* in grossness and impurity." Considering, then, that the liver has to filter out a great share of this impure and gross matter, it can be readily seen why, at least, those living in climates predisposing them to inactive livers, should not eat such food. Instead of being more careless in their diet, the inhabitants of warm countries should be much more careful than those living in colder climates, so that, by preserving a healthy liver, this organ may do part of the work usually given to the lungs. Where the air is expanded by heat, and consequently less oxygen by weight inhaled at each inspiration, there is need for this. In unborn infants, who are entirely shut out from the oxygen of the air, the liver has to do the work of the lungs in decarbonizing the blood, but nature provides for this necessity by making the liver larger than all the internal viscera, and still larger in proportion in utero life. After birth, when the lungs begin to perform their functions, this relative disproportion is modified, and it then behooves the more developed being to keep both organs in a healthful state.

People living under a southern sun can do this with care and the exercise of a little self-denial. Their food should be nutritious rather than stimulating. Gluttony and dissipation above all things should be rigidly avoided. Remember that the golden rays of the sun may

paint the complexion brown, while every organ is faithfully performing its functions, but that when old dame Nature brings in a tint of yellow, the liver has failed in the performance of its duty.

Fig. 93.

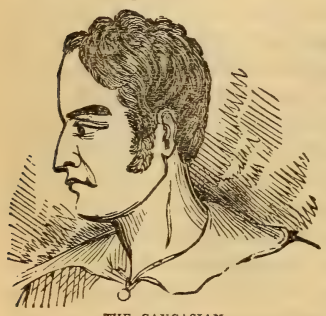
THE ETHIOPIAN.

What I have just said regarding the influence of the atmosphere of the tropics on the liver, is applicable to the Caucasian rather than to the Ethiopian race. The Creator has done all things well, and those who were especially made to breathe the scorched air of tropical climes have broader nostrils and greater depth and breadth of the respiratory apparatus (see fig. 93), so that they may inhale a greater quantity of the heat-expanded atmosphere at each inspiration than can the Caucasian (see fig. 94), with his compressed nostrils and less capacious throat and lungs. The liver, too, of the negro, is proportionately larger, while his nervous system does not possess that acute sensitiveness and liability to disorder which characterizes the finely organized nervous structure of the white man. Nor does he seem to require so much nervous stimulus to carry on his sluggish physical machinery. Our sable brother is almost a stranger to nervous diseases. He sometimes has liver derangements arising from vascular impurities, but even then he gets off with comparatively little suffering, for the reason that his excretory pores are as much more open than those of his white neighbor as the texture of his skin is coarser. Hence the odorous effluvia which proverbially emanate from the skin of the unadulterated negro. In perfect health, the excretions of his skin greatly relieve the depurating labors of his liver, and when hepatic difficulties do overtake him, the amount of the excretions is considerably increased, unless the pores are simultaneously closed.

The physical organization of the Ethiopian also better enables him to withstand the deleterious influences of bad air in malarious districts. It has been found that the hanging of wet blankets or sheets at the open windows in malarious regions, greatly purifies the air which enters an apartment. This is because water is a disinfectant, rendered so by its disposition to take up poisonous gases. Well, now, the negro has as good protectors as wet blankets or sheets at

his mouth and nasal passages. The red lining of the lips and nostrils in health is always moist, as all know. Hence the large lips and nostrils with which he is provided, with their large surfaces of the moist red lining or mucous membrane, serve as disinfectant protectors, such as the Caucasian, with his thin lips and compressed nostrils, does not possess. And the rule may be put down as invariable, that those persons, black or white, who have the thickest and widest lips, and the largest and broadest nostrils can the best endure the depressing atmosphere of malarious tropics.

Fig. 94.



THE CAUCASIAN.

Disturbances in the purity and tonicity of the air, are what predispose the people of new countries to torpid livers. The miasmatic emanations from the soil of a country recently cleared of its timber and shrubbery, greatly adulterate the atmosphere, and thereby induce those nervous disturbances which are so apt to leave the liver without sufficient nervous stimuli. Our Western friends are famous for torpid livers. Nearly all of them are enveloped in sallow skins; and in those presenting themselves to me for medical examination, I usually find the liver seriously involved, whatever other complications may exist. Even the livers of beef cattle driven here from those regions, and slaughtered for our market, are seldom free from disease.

It may not be possible, therefore, for the pioneers of new countries to entirely escape hepatic or liver complaints; but it is nevertheless true that such difficulties are more prevalent among them than would be the case if proper regard were paid to hygienic laws. Western farmers are proverbially great pork-eaters, and pork-eating overloads the blood with carbon, and gives the liver too much work to do. Nor are farmers alone addicted to the use of filthy swine's flesh. The denizens of Western cities glut their stomachs with spare-ribs and sausages. The farmers usually carry more healthy countenances than citizens, because their physical exercises are better calculated to dispose of the excess of waste and impure matter by perspiration. There is another reason why citizens wear a more sallow

skin than the industrious farmer, which is, the vice in all cities of turning night into day, while farming communities, exhausted with physical labor, retire early. A Western citizen supposes he can expose himself to night air with no greater injury than the indweller of the old Eastern cities receives who does the same foolish thing. This is an error. Miasmatic vapors, as before remarked, are more excessive in new cities, and at night-time they mingle more freely with the lower strata of air. Then, too, vegetation which, during the day, takes up carbon and gives off oxygen, reverses this process at night, so that carbonic gases are its nocturnal exhalations.

Here, then, we see why our Western neighbors can not imitate the vices of our Eastern metropolitans without suffering a severer penalty by bringing upon themselves greater derangements of the nervous harmony and biliary system. To avoid these derangements they should not indulge, excessively, in carbonaceous food and drink; they should retire early, select for sleeping-rooms those apartments most elevated from the ground, in order to get beyond the miasmatic gases which hover near the earth's surface at night-time; open the windows for ventilation, and if the sleeping-room be near the ground, to escape the poisonous vapors, hang wet curtains before the windows, for water, as before remarked, is an excellent disinfectant, and readily takes up deleterious gases. In the most unhealthy localities it is better to ventilate sleeping apartments by this process than to breathe, over and over again, the air which has been poisoned by the exhalations from the lungs and skin.

Persons of sedentary habits in all countries, can see from the preceding suggestions, the necessity of breathing pure air and observing correct dietetic rules if they would preserve healthy livers and a skin free from the sallow tint of bile.

There is a disease of the liver which is the perfect antipode of torpidity. This is called Hepatalgia. It seldom occurs, except in persons of a neuralgic diathesis. It is in fact a kind of neuralgia of the liver. There is both an excess and an abnormal circulation of the electrical forces in the nerves of this organ, producing paroxysms of pain with intervals of rest and comfort. The functions of the organ are not interfered with, and the tongue is often free from any coating. If coated at all, it is of a slight creamy character, and the urine is greater in quantity and lighter in color than is usual. As already intimated, persons subject to nervous irritability or inflam-

mation are alone liable to this disease, and every thing which tends to unduly excite the nervous system in such cases, is calculated to induce or aggravate an attack.

Contact with the atmosphere of damp basements, mouldy buildings, and marshy localities, frequently predispose people to Grub in the Liver. It has been found by actual microscopic experiments that the air of such places is generally infested with a kind of animalculæ, which are awakened into new life and development when inhaled by an individual whose blood is not free from impurity. Sometimes they remain in the respiratory organs, producing grub consumption, but more frequently, nature tries to dispose of them by getting them into the venous blood so that the liver can have an opportunity to send them off with the bile and waste matter which mingles with the excrements. If the liver is not torpid, and if the blood does not contain impurities calculated to give them nourishment, it will usually accomplish this. But if torpidity or any derangement of the liver resulting from impure blood be present, then they will take lodgment and prove troublesome creatures to get rid of.

"Renault once analyzed the stomach, liver, and lungs of a man who died in a damp cellar, submitting its parts to microscopic investigation, and found that the interior system of the poor fellow was literally swarming with animalculæ. He declares that in order to have these parasites enter the human frame, 'it is not required that matter in which they abound should be taken into the stomach.' At a certain period of development, the cell containing the germ bursts, and it floats out on the air, seeking lodgment. If at this time it is inhaled, the effects will be the same as though it were swallowed. A man may be poisoned, therefore, from breathing the air of a close cellar, or from 'inhaling the odors exuded by the putrefying carcass of a dead dog.' Science thus shows it to be possible for human beings to be attacked and slain by animals so insignificant in size that the unaided eye cannot

Fig. 95.

GRUBS IN THE LIVER.

even distinguish them; but so incomprehensibly numerous, that islands and reefs have been built by their efforts."

Pork-eating sometimes causes grub in the liver, as might be inferred by the perusal of what I have said about pork, commencing on the lower part of page 56. Whatever the cause, the disease is always attended with exceedingly disagreeable, if not actually painful sensations. The parasites occasion a peculiar gnawing feeling in the region of this organ which can hardly be described, and in such cases discharges from the bowels are not unfrequent, at times, copious, watery, and more or less permeated with the vermin, and, at others, constipated and tender.

Impure and impoverished blood in many cases gives rise to Consumption of the Liver. Ulceration, tubercular affection, and decay of the organ, may very properly be placed under this head. In brief, whatever tends to decompose or destroy it, may be properly termed Consumption of the Liver. This difficulty is usually attended with a cough, vomiting, sudden changes of countenance, and at times with all the symptoms of pulmonary consumption. This is particularly the case when the liver has glued itself to the diaphragm and the lungs, so as to open a passage into the bronchiæ for the discharge of its tubercular and cancerous matter. When such an adhesion or discharge through the respiratory apparatus takes place, the symptoms are exceedingly deceptive, and often lead to the grossest errors on the part of medical men, who are usually too apt to form an opinion of the nature of a case by taking into account the most prominent symptoms. But external symptoms are often unreliable, unless considered in all their relative bearings. Any invalid at a distance suffering with a disease of an obscure nature, should answer the questions to invalids, in this book; and I feel confident that with such information before me, I can arrive at a correct diagnosis. Those living where they can consult me in person need not give symptoms, for one of my searching examinations cannot fail to reveal to my mind the real nature of the case. It is extremely hazardous to treat liver consumption as if it were lung consumption, for the reason that remedies usually given for the latter are very obnoxious to a weak and disabled liver. Medicines of an oleaginous or fatty nature are particularly fatal. Almost every thing which enters into the composition of the popular cough-syrups is also extremely injurious. Invalids affected with suspected ulcer-

ation of the liver, will be interested in the perusal of the letter from a physician on page 592.

Besides torpid, wormy, and consumptive livers, there are several diseases of the organ, which often assume a chronic character, among which are Inflammation and Enlargement of the Liver. These diseases are attended with more or less cough, headache, clay-colored stools, pain in the right side, shoulders, and often with swelling over the region of the liver. The invalid is apt to be melancholy, dyspeptic, irritable, sallow, emaciated, and costive.

Constipation is liable to be a close companion of all derangements of the liver. The reason for this is, that when the liver is affected the bile is not properly secreted, and when this fluid is withheld from the duodenum, the innutritious is not properly separated from the nutritious matter, while the excrementitious deposits in the intestines, become hard, dry, and irritating, in consequence of the absence of the soapy fluid, which, furnished in abundance, softens and lubricates the fæces, giving them an easy passage through the intestinal canal.

Liver derangements of all sorts, which are generally the causes of constipation, and hundreds of other unpleasant symptoms, are usually curable if properly treated. Mercury often relieves, but never cures a case of chronic liver disease. Even if it were an actual specific, the remedy would be far worse than the disease. The way in which mercury stimulates the liver to action, is by its generation of nervous or electrical forces in the stomach, which forces are conveyed to the liver by the nerves connecting it with the stomach. Mercury is often employed by the electrician to produce electro-galvanism, and the gastric or acid juices of the stomach make the same use of it as do the acids of the galvanic battery. What is chiefly wanted then to give temporary relief, is something that will, by contact with the gastric juices of the stomach, readily generate nervous or electrical force for the stimulation of the liver. Such a remedy can be found without poisoning the system with calomel or blue pills. My magnetic anti-bilious pill is a charming substitute for blue pill, and is so considered by all who have tested its virtues. The necessity for employing mercury in any form is removed, if any such necessity really ever did exist, by the discoveries in electro-therapeutics. My magnetic pill, which I claim to be an innocent substitute for mercury, should be in every house in the Western and

Southern States, for inasmuch as it produces its effects by electrically stimulating the biliary system to activity, it is suited to all temperaments and all climates. In the incipient stages of liver affections it gives immediate relief, and, in fact, may be given beneficially in all cases in which calomel is employed by old-school practitioners. A person making use of this excellent remedy can feel sure that he is not filling his system with pernicious drugs. (See page 911.)

In the treatment of obstinate and difficult liver complaints, however, poisonous mercury and its harmless substitute are of little avail. In such cases the *causes* should be ascertained. If of a nervous character, as in torpidity and hepatalgia, a course of treatment embracing electricity in some form must be employed, and if the invalid cannot avail himself of the inspiring currents of the Electromotor at my office, together with such adjunctive treatment as may be necessary, he should have recourse to electrical medication. (See page 299.) If the offspring of diseased blood, as in the case of grub, consumption, chronic inflammation, and enlargement, electrical medication is alone the proper treatment. I like to treat diseases of the liver. My rational system of electro-therapeutics seems to hit the right spot, and many a despondent sufferer has been made glad with the inspiring effects of my electrical applications, accompanied with suitable adjunctives, or with the building-up virtues of my electrical medication. Those who cannot consult me personally, are referred to page 583. A full description of the case would enable me to correctly diagnose and prescribe. Above all things avoid mercury. It is quite as comfortable to suffer with hepatic or liver complaints, as with rheumatism or mercurial sores. Better take beer boiled with horseshoes (!), and die on the spot. This was a remedy recommended by an illiterate fellow in Sherbourne, England, recently, and it came near killing the patient. Still, death is a blessing compared with the tortures of mercury, and I am not sure that I would not adopt the Sherbourne remedy in preference to the blue pill.

Fig. 96.

The Pancreas and its ducts through which the pancreatic fluids pass to the duodenum.

If proper regard would be paid to the various ways of avoiding liver affections, which are suggested in this essay, much suffering would be averted. Those, however, who are already victims to such

complaints, must resort for relief to proper remedies, and in haste to get well, they should not tamper with those poisonous and powerful preparations, which are so apt to leave the system in a worse condition than they found it. It hardly pays to exchange one disease for another, particularly when it is almost certain that you are going to get the "worst end of the bargain."

Dyspepsia.

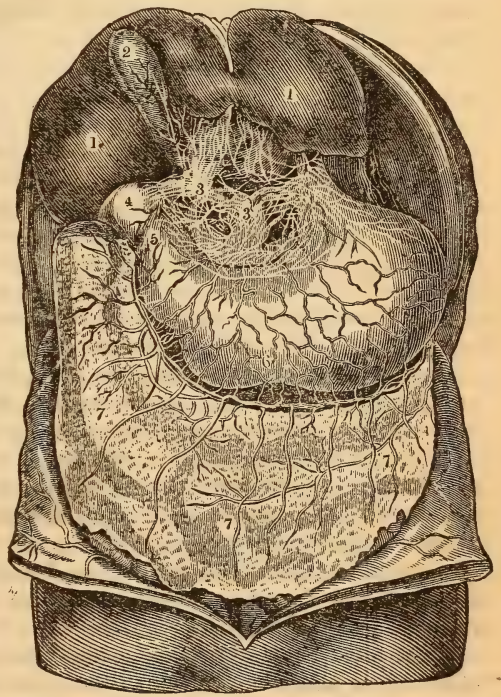
This is one of the most common diseases that afflict humanity, and the suffering is by no means confined to the greatly abused stomach. The brain at once enters into sympathy with this important organ of digestion when it is disordered. So intimately are the head and stomach connected by the nervous system that mental disturbances will destroy appetite, and arrest the progress of digestion; and digestive derangements will produce depression of spirits, irritability, hypochondria, and almost insanity.

The immediate causes of dyspepsia, nearly everybody is familiar with. They are—rapid, immoderate, and irregular eating; excessive drinking; injudicious drugging; tight dressing of the waist; excessive brain labor; grief; anxiety; and jealousy. Tobacco smoking and chewing, in many cases, cause such a waste of the salival fluids by expectoration that the food enters the stomach insufficiently mixed with them. The importance of the salival fluids in performing the digestive function, is given in the introductory matter of this chapter. The excessive use of alcoholic liquors irritates and inflames the lining of the stomach, and this leads to dyspepsia. Only those who have weak or feeble stomachs without irritation, are benefited by the use of tonics or stimulants. The immoderate use of condiments also induces irritation or inflammation of the lining of the stomach. I am often surprised beyond expression at the test of endurance some people put upon their stomachs in the wholesale use of pepper, mustard, and horse-radish. The amount of any one of these things swallowed at one meal by some individuals, would draw a blister in an hour or two if applied to any external part of their persons. How the stomach manages to dispose of these things without getting burned, is a mystery to anybody who realizes how much more susceptible the mucous membrane is to the effects of irritants, than is the cuticle. Hence, it is perceived, the immediate causes of

dyspepsia are as numerous as are bad habits. The *predisposing* and *perpetuating* causes, however, are what are generally overlooked. What are they?

The predisposing and perpetuating causes of dyspepsia are, impure blood, and derangements of the nervous system. When the blood is at fault, the lining of the stomach is liable to an attack of eruption, or irritation, or inflammation. In this form of dyspepsia the invalid experiences pain, soreness, gnawing, burning, or other inflammatory symptoms; with an empty feeling, sourness, wind, trembling, nausea, etc., at the stomach. Not all of these symptoms in any one case, but some one or more of them. When the dyspepsia proceeds from nervous derangements, the symptoms are, usually palpitation of the heart; trembling at the pit of the stomach; a weak or all-gone feeling at the stomach; while the body appears attenuated, and the countenance pale; the sleep disturbed; the

Fig. 97.



NERVES OF THE STOMACH.

The above figure shows how extensively the stomach and digestive apparatus is permeated with nerves. The liver (1) is turned up to exhibit the anterior surface of the stomach; also the gall bladder (2). The organic nerves are marked 3, 3, while the pyloric extremity of the stomach and the contracted portion of the pylorus are indicated by the figures 4 and 5; 7, 7, 7, mark the omentum.

spirits more continually depressed; and the mental and physical energies subdued.

In either of the foregoing forms of dyspepsia, the food passes through more of a rotting than of a digesting process, and the gases emanating from the decomposing mass, cause acidity and flatulency. Then the nutritious substances are so contaminated by properties calculated to irritate or inflame the blood, that rotten apples would answer about as well for food as sound vegetables and meats; and they would impart about as much benefit to the system.

Epicures; good feeders; or those who are denominated "fast livers;" and those who have plenty of flesh on their bones, are the most liable to that form of dyspepsia which is perpetuated by blood impurities. Imprudence in eating produces in, and sends forth from, the stomach to the vascular fluids, impurities which in time "come home to roost." They pay a visit to their maternal home, and their presence is any thing but agreeable; for like wanton children, they mark and deface the walls, and turn every thing topsy-turvy. Some unfortunate people, however, have this form of dyspepsia, who have not been seemingly irregular in their habits. This is because they either inherited or contracted scrofulous impurities; or took injurious medicines or were poisoned in some way. These dyspeptics are lean or fleshy according to their temperaments. I have met with dyspeptic invalids whose parents on one side were scrofulous, and on the other, predisposed to diseased livers, and weak stomachs—a capital hereditary combination to produce dyspeptic progeny. The children of such parentage are as sure to inherit dyspepsia as those of affluent parents are to inherit wealth.

Professional men, students, and other brain-workers are most liable to that form of dyspepsia, which is perpetuated by nervous derangements. By too close mental application they exhaust nervous vitality, and consequently, too little nervous stimulus is given to the stomach to render digestion properly active. Dyspepsia of this form may also proceed from nervous derangements induced by any excessive mental emotion, or by venereal excesses; masturbation; or from diseased procreative organs of either sex, as these affections invariably prostrate the nervous energies.

Dyspepsia, in many cases, is perpetuated by both blood and nervous derangements; or, in other words, the blood of the dyspeptic being impure and the nervous forces insufficient or misapplied, a

complicated form of the disease exists. Mental depression and irritability, if not imaginary horrors, are ever present when both of these constitutional derangements form the root of the digestive disturbance. "Physically," a writer speaking of this class of invalids, remarks, "the dyspeptic has many evils to contend with; pain in the chest, and other parts of the body, particularly the left side and the sternum. The muscles of the body become weak and flabby, manifesting soreness on the least unusual exertion, with lameness in the limbs, etc. There is tenderness in the region of the stomach and the hips, felt upon pressure. The extremities are cold and rigid; the skin dry, rough, and pale; hands and feet usually cold, are sometimes hot and burning. The patient at times is distressed with night-sweats, bad sleep, and worse dreams. He seems heir to a thousand evils, changing in their nature—old ones vanishing, new ones appearing. Some of the most alarming to the sufferers, are palpitation and cough. He is troubled with vertigo, ringing and other sounds in the ears. Sometimes he hesitates in his speech—has uncertain action—is pleased with nothing—pleases nobody—has abundant occasion for regretting blunders of manners and morals. Moral power he seems greatly to lack; he has lost self-control, follows this whim and that, but never the doctor's prescription to the end—he cannot remain in the mood long enough. Hence the disease is prolonged, especially as time is necessary to a cure. He has no patience for that, he is so moody, so wavering. In a word he is only the shadow of himself." This is a very fair description of the condition of body and mind in a case of complicated dyspepsia. A man or woman so affected cannot be a practical Christian! The victim grumbles and frets involuntarily, and creates a domestic hell at his or her own fireside. Surrounding friends try to be forbearing and make all due allowance for the unfortunate physical derangements of the invalid; but incidents will occur when patience is strained almost to the point of breaking, when relatives and friends are compelled to cry out, "What next?" as the tadpole has been reputed to exclaim when he loses his tail!

There is still another class of dyspeptics who suffer little except from leanness; susceptibility to cold; and general lassitude. Persons thus affected have stomachs so inactive that the food might about as well pass down outside as inside. A soup bath might answer still better! The stomach is never provoked into making

use of what is put into it, and in many cases the appetite of these invalids is perfectly enormous. Everybody wonders where so much food goes to. It seems as if the hungry and wasted system was constantly crying for food, causing a disposition to eat voraciously, while the stomach remains an idle spectator to all that is passing. It is questionable whether invalids so affected derive any nourishment at all from the usual digestive process. As the food passes along the œsophagus, and through the upper and lower stomach, and finally along the crooked path of the intestines, the mucous membrane absorbs enough nutriment to keep the person alive by the aid of air, sunlight, and social magnetism. The predisposing and perpetuating causes of this form of dyspepsia are, deficiency of red corpuscles in the blood, and lack of nervous vitality; and these causes are aggravated in every case by the very disease they have induced.

In cases of dyspepsia like those last mentioned, electrical treatment of some kind is necessary to arouse the sleeping stomach. If your hired man is sleeping under a tree in the hay-field, you will go to him and give him a good shaking. This is just what your stomach needs. Animal magnetism accompanied with active manipulation, pinching and gentle kneading, is sometimes sufficient. The application of electro-magnetism by a skillful operator, is excellent. I have cured the most obstinate cases by each of the foregoing agencies, and also by electrical medication. In the forms of dyspepsia previously mentioned, however, electrical medication (see page 299), or a proper adaptation of electrical applications and blood-purifying medicines, will generally succeed. Both acidulous and alkaline remedies, also stimulants and tonics, are commonly resorted to, to allay the horrors of dyspepsia; but they in no case cure the disease.

The "hunger cure," never cured dyspepsia. By keeping solid food out of the stomach, or partaking sparingly of Graham diet, the stomach will become quiet and less troublesome; in other words, you can tame some diseased stomachs as you can a savage animal, by starvation; but in these cases, as soon as the patient returns to solid food, his stomach rebels again. I have often been applied to by dyspeptics who have been through a course of hydropathic treatment, which generally includes the "hunger cure." They had left hydropathic institutions thinking that they were well, but a return to their accustomed diet brought back all their troublesome symptoms, and they were again on the sick-list. I remember to have

examined a case of this kind who had resorted to the popular schools of medicine, and advertised panaceas, but failing to receive relief from any of them, had been living for years at the water-cures; he finally thought himself fully restored, and returned to his former diet and avocation (he was a sea captain). His return, however, to his usual table-fare brought back all his old troublesome symptoms, notwithstanding he had exercised great prudence. On examining his blood I pronounced it scrofulous, and remarked that he had an eruption in the lining of the stomach which, if on the skin, would resemble salt-rheum. He was reluctant to accept my opinion as correct because he had never in all his life been affected with eruptive diseases externally—not even a pimple. My own confidence in the diagnosis would have wavered had not the indications of his blood been to my mind unmistakable. He almost faithlessly became my patient, but at the end of about two weeks he came to my office very much excited and alarmed, and hurriedly taking off his coat asked me to look at his arm. Lo! from his shoulder to his elbow it was covered with salt-rheum! a scabby, scaly, inflamed, and swollen eruption! He did not like the looks of it! He was fearful the medicine was acting too vigorously! "But how about the stomach?" I interrogated. "Oh! that is a great deal better," he replied. I reminded him of my opinion as given at the first call, and after assuring him that the external difficulty would disappear as his blood improved, he pressed on with the treatment with new confidence, and within a few months was radically cured. So far as the hunger-cure is concerned, or any thing approaching a starvation diet, a remark made by some one regarding the transportation of beef cattle without food or drink, may be quoted in this connection as equally applicable to the human body. "Such is the law of the animal economy, that whenever the regular administrations of food and drink are withheld, there is a draft made on the reserved blood-making deposits to supply the exhaustion of the muscular and nervous powers of the system; and this speedily results in the absorption of the cellular juices." The dyspeptic must, therefore, be well fed, but with what? My reply is with any thing, which has the reputation of being digestible food, that best agrees with the sufferer. No one can select the kind of food for any individual case so well as that individual himself, provided he observes effects, and governs himself accordingly. But all dyspeptics may safely and

beneficially give attention to one rule, viz.: eat slowly—masticate every mouthful of food thoroughly before swallowing it, and either abstain altogether from, or take only moderate exercise for some time after each meal.

The mind of a dyspeptic must be occupied with something. Traveling or light business requiring more muscular than brain effort, answers very well; unless the mind is diverted in some way, it dwells too much upon the existing disease. Dyspeptic invalids, therefore, only aggravate their afflictions, when they abandon entirely their usual occupations, unless they turn to others regarded more healthful or spend their time in journeying. Those wishing treatment and encouragement are commended to a careful perusal of every line of Chapter XIII. in this Part.

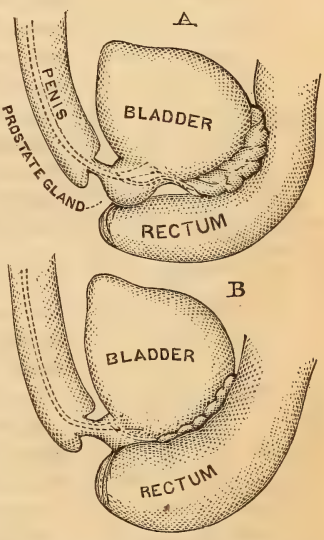
Constipation.

To properly understand the causes which may produce this common and troublesome difficulty, it is necessary to know the process by which the solid waste matters thrown from the stomach, are disposed of. It has already been explained at the beginning of this chapter how the liver, if active, supplies a saponaceous fluid called bile to mix with, soften, and lubricate them. Then on entering the intestines, there is a worm-like motion technically called peristaltic action of these tubes; or, in other words, a contraction of the fibres of the intestines above the matter to be removed, which carries it constantly along. Then at stool the breath is inhaled so as to depress the diaphragm, which produces a pressure downward upon the intestines; and the muscles of the abdomen contract so as to produce pressure in front of them; and it is by this process that the residuum of the food taken into the mouth, and the excrementitious secretions of the colon are cast out of the body. It will be interesting here, if the reader has not already done so, to turn to figure 92, and observe the convolutions of the intestines, and the circuitous route which the fæces are compelled to pursue before leaving the system.

To prevent a blockade, and to encourage the peristaltic action of the intestines; and, in fact, to properly relieve the human machinery of waste matters, every person ought to have one thorough evacuation of the bowels at least once a day. Some very hearty eaters may better have two. If the fæces are dry, and much straining is required

for their expulsion, even if the bowels move regularly once a day, the person so affected may very correctly be said to be constipated. Simply this sluggish condition is liable to induce serious derangements, such as falling of the rectum and piles; and, when the blood is in a scrofulous condition, difficult stooling may induce ulceration, abscess, or fistula.

Fig. 98.



AN ILLUSTRATION SHOWING HOW THE MALE ORGANS ARE AFFECTED BY CONSTIPATION.

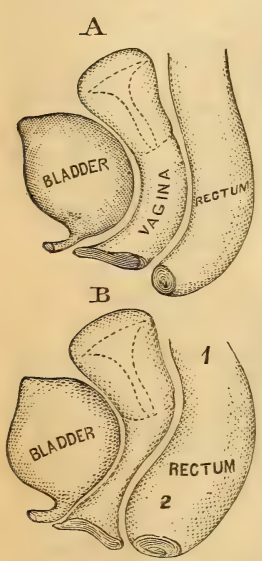
The immediate causes of constipation are—a diseased liver, by which an insufficient supply of saponaceous bile is given to the waste substances to soften and lubricate them; a retention of the fæces until their fluidity has been absorbed or evaporated in disagreeable gases; the use of food that too greatly absorbs the fluids; the use of astringent food or medicine; the habitual use of too concentrated nutrition—for there must be bulk as well as true aliment; over-eating, by which the digestive apparatus and the intestines are unduly distended; relaxation of the muscular fibres of the intestines, so that they contract feebly; contraction of the respiratory organs by tight lacing or disease, so that the diaphragm cannot be deeply depressed; weakness or flabbiness of the abdominal muscles, in consequence of which the bowels can give little or no pressure in front; and partial or complete paralysis of the rectum, in which case it has not the power to expel substantial fæces.

The predisposing causes are usually sedentary habits which depress the nervous energy, and weaken those forces which give activity to the various parts depended upon for the energetic expulsion of the useless solid matters of the system. Blood-impurities, in many cases, intercept the nervous forces, and practically produce the same result.

Everybody who has ever been affected with constipation is familiar

with many of the effects: the crowded, distended feeling of the bowels; the drowsiness and lassitude; headache; and, in some cases, disagreeable breath and offensive effluvia. But most people are not aware of the injury inflicted upon the procreative organs of those of both sexes. For this reason I have had designed and engraved the annexed illustrations, figures 98 and 99. The relative location of the rectum and seminal vesicles, and prostate gland, is given in figure 98. In the illustration marked A the seminal vesicles and the prostate gland are exhibited as they appear when they are not crowded by a constipated rectum. The prostate gland is that bulblike formation just over the anus or mouth of the rectum. The seminal vesicles lie back of the prostate gland between the bladder and rectum. The location of these vesicles may be still better understood by turning over to figure 136. Now look at B, in figure 98, and see how, when the rectum is engorged with excrementitious matter, the gland and vesicles are pressed. Unless the person so affected is remarkably strong in these parts there must be inevitably an involuntary exudation of both semen and prostatic fluid. Especially must this be the case at stool when by straining this pressure is aggravated. Then, too, when the anus becomes irritated and inflamed by the straining and friction, that irritation is almost always communicated to the prostate gland and spermatic vessels, producing, or greatly aggravating involuntary nocturnal seminal emissions. When pinworms exist, as they often do in this diseased and engorged condition of the rectum, the itching and tickling caused by the movements of the parasites, also predispose the one so affected to involuntary emissions. The frightful consequences of these seminal losses are presented in an essay on seminal weakness in a chapter farther on.

Fig. 99.



AN ILLUSTRATION SHOWING HOW THE FEMALE ORGANS ARE AFFECTED BY CONSTIPATION.

Now, let me call your attention to figure 99, representing the female organs. The illustration designated by the letter A presents all the organs in their proper condition—the bladder in front; the vagina next; and the rectum behind. Above the vagina an outline of the womb is given and its cavity dotted out. Below this picture, B represents these same organs when the lower part of the rectum, marked 2, is distended with fecal matter. The cavity of the vagina, it is noticed, is nearly obliterated, and the womb is somewhat pressed above its natural position. This engorgement, in many cases commences even above figure 1, and in these instances the womb is pressed downward and forward, and sometimes frightfully displaced. When badly prolapsed, it becomes inflamed, congested, and swollen; and in this condition it retaliates upon the rectum, and to such an extent in some instances as to almost close the canal through which the excrementitious matters pass out. Here, then, is a jargon which in its effects is very troublesome. It is most unfortunate for a person of either sex to suffer with this mutual antagonism and crowding of the organs represented in the illustrations given. In health there is space enough for them all, and elbow-room sufficient to enable each to perform its allotted function; but when the rectum or intestines above become engorged with waste matter, disorder commences, and a regular family fracas ensues, or a sort of civil war, which in time involves every organ of the system.

In some cases the intestines and upper part of the rectum succeed very well in moving along the waste matters, while the lower part of the rectum is nearly paralyzed. In such persons the blockade takes place at about the point designated by figure 2, in illustration B, representing the female organs. Here a regular fecal plug forms, and in a little time becomes as hard as a rubber ball. The disposition is constantly felt to go to stool, but after repeated failures, in which the rectum is painfully irritated, and the adjoining organs most uncomfortably pressed and strained, the person affected is apt to give up the effort, and turn to cathartics to remove the obstruction; but it is soon discovered that the dissolving effects of the cathartics do not reach the plug at all, while the intestines and their contents above are disagreeably affected by the action of the medicine. When at last the physician or some knowing friend is consulted, an injection of oil, or molasses and water, or something else, to act locally upon the plug, is prescribed. By these means the

patient is relieved, and with the removal of the plug there comes a regular freshet of what had been retained above, and changed almost to a scalding mixture by medicine. The parts now smart and burn with irritation; and the sufferer is fortunate if piles do not attack the rectum. As this plug may be easily reached, the better way at the outset, before either medicine or injection is used, is to take to the water-closet a vessel of either sweet or castor oil, or any relaxing ointment, and while making a gentle straining effort, lubricate the rectum well with the oil, and actually pick to pieces the indurated fecal plug. Then look out next time and not go too long without another effort to effect a movement; for this difficulty is not unfrequently induced by deferring attention to nature's call. In some cases, if a strong inclination to evacuate the bowels be disregarded for twenty minutes, this fecal plug will form low down in the rectum, and harden so rapidly, that when an effort is made, it cannot be moved a particle without artificial aid.

An inactive liver and obstinate constipation, in many cases, compel nature to dispose of the bile and waste matters through the excretory pores of the skin. When so expelled, the effluvia of the person are very offensive, and the linen worn next to the skin quickly discolored. If the under garments are worn for a day, they look as if they had been colored by a dyer. Such invalids owe it not less to their companions and friends than to themselves to adopt early and thorough medical treatment. They are a stench in everybody's nostrils, or, in brief, traveling nuisances, which should be speedily cured or abolished. Such persons generally feel pretty comfortable, because nature manages to dispose of the excrementitious matter. The atmosphere becomes their privy or water-closet, and no one would be surprised at the intuition of the dog in smelling out the tracks of his master, if all men were thus diseased.

In the treatment of constipation, the causes should be ascertained; and so long as the popular mind is so ignorant of the human machinery, a physician should be consulted to avoid mistake. Those wishing to consult the author, can answer the questions on page 583. Before taking this step, however, it is well enough to see what care in regard to diet will effect. It is not uncommon to see persons of constipated habit, make a breakfast of wheat-bread toast, or a luncheon of crackers and cheese. These are the worst things that can be eaten in a case of constipation. They will constipate a per-

son in perfect health if eaten to any great extent. Fried and baked potatoes; vegetables and meats cooked brown; fine wheat bread; rice in any form; sweet apples; blackberries, fresh or preserved; and all food and fruit of an astringent quality, are bad for people of costive habit. Among those things which may be used to advantage, are brown, corn, Graham, and rye bread; wheaten grits, or cracked wheat; hominy; mush; tomatoes; beans; peas; squashes; green corn, fresh or canned; boiled or stewed potatoes; meats cooked rare, etc.

Constipation may often be relieved by relaxing fruits. Grapes are useful in such cases when the seeds are swallowed with the pulp. The *Medical Magazine*, in speaking of the virtues of the grape, remarks as follows: "When in health swallow only the pulp; when the bowels are costive and you wish to relax them, swallow the seeds with the pulp, ejecting the skins; when you wish to check a too relaxed state of the bowels, swallow the pulp ejecting the seeds, also masticate the skins well and swallow the astringent juice of them. Thus may the grape be used as a medicine, while at the same time, it serves as a laxative, unsurpassed by any other fruit. An adult may eat from three to four pounds a day with benefit. It is well to take them with or immediately after your regular meals." The French say of the grape that "it not only dilutes the thick blood but sends the circulation to the surface, giving color to the pale

Fig. 100.

A DELICIOUS-LOOKING MEDICINE.

cheek; that it removes obstructions from the liver and lungs, aids digestion, brings the stomach and bowels into a healthy state, dislodges gravel and calculi from the kidneys, and confers vigor and health upon the prostrate system." All acidulous fruits act favorably in cases of constipation: such, for instance, as sour apples; oranges; lemons, etc.; while figs, though sweet, are relaxing and beneficial. Perfect regularity at stool is essentially necessary to prevent and cure constipation. When at stool, kneading the bowels with the hands, or otherwise pressing and manipulating them, aids in producing an evacuation. Fixing the mind upon the function of expelling the fæces, also aids; while the action of the mind in thinking of other matters, or reading, greatly retards a free movement of the bowels.

All the foregoing rules in regard to diet, etc., should be religiously observed by constipated people, and then if the difficulty continues, ascertain to a certainty where the causes lie, and adopt treatment suitable to their removal.

Chronic Diarrhœa.

Here we have an affection of the bowels directly opposite to that considered in the preceding essay. Diarrhœa is characterized by frequent thin or watery stools; heat, and sometimes smarting, in the bowels; a dragging or downward pressure in the rectum; and, in severe cases, faintness at stool. In the chronic form of the disease, one or more of these symptoms may or may not present themselves prominently. There are those affected with chronic diarrhœa who have but one passage of the bowels per day; but that passage is loose, perhaps watery, and possibly attended with great flatulency. There are other cases in which the bowels move frequently during every twenty-four hours, who experience no other disagreeable symptoms or inconvenience. They seem to feel pretty well, but are compelled to attend to the calls of nature so frequently as to greatly annoy them, whether indulging in recreation, sociality, or engaging in their usual avocations. Especially will persons thus affected feel an inclination to stool when under any excitement. Then again there are those who are alternately relaxed and constipated. For a few days or weeks they are uncomfortably bound up, having no evacuations of the bowels; when suddenly and almost without warning the flood-

gates give way and the excrementitious matters pass off in a softened or fluid form every few hours for a certain length of time.

The causes of chronic diarrhœa are various. In that form last mentioned in the preceding paragraph, the liver remains in a state of stubborn torpidity for a time; then it changes to an activity reversely as excessive, and the bile which has been dammed up in the system, pours down the ducts into the lower stomach and bowels, and dissolves to fluidity the excrementitious matters, and they run off in streams much to the discomfort and annoyance of the invalid, who, while feeling relieved from the heaviness, drowsiness, and fulness of the costive condition, suffers from a sensation of weakness and a bearing down or dragging sensation almost unendurable, together with a scalding or smarting feeling after each stool. The derangement of the liver in these cases proceeds from a want of regular nervous action in that organ, and the disposition of the recuperative powers in some persons to force hepatic action and overcome obstructions when the circulation becomes loaded with bile and the intestines engorged with fecal accumulations.

Diarrhœa may also arise from the blood being so impure as to render the bilious secretions acrimonious and too solvent, in consequence of which the fecal contents of the intestines are rendered watery and irritating to the coatings of the intestinal canal. Sometimes blood-impurities cause eruptions along the lining of this canal, and these eruptions give off a catarrhal secretion, which acts as a solvent and irritant. In persons of a scrofulous diathesis, ulcerations sometimes take place in the bowels, the discharge from which mixes with the fæces, and gives them a diarrhœal consistency. Excessive drugging for liver derangements, constipation, and other difficulties, has often induced intestinal irritation, which in turn has caused chronic diarrhœa. A dyspeptic stomach, which gives rise to great acidity and flatulency, may impart to the waste matters that pass from it undue solvent qualities, and thereby cause diarrhœa. At the close of the great rebellion I was consulted by a Union soldier, who received a bullet-wound in the abdomen three years previously, since which time he had been constantly affected with chronic diarrhœa. The ball had been extracted, but irritations remained which caused catarrhal and ulcerous secretions, and sympathetically affected the digestive organs. He was greatly reduced in flesh, and looked as bloodless as one in the last stages of consump-

tion. Notwithstanding, however, the peculiarity of the case, and his repeated failures to get well, under various systems of medication, his difficulty readily yielded to my remedies, which were prepared with reference to the restoration of his blood, and the vitalizing of his wasted nervous system.

In all cases of chronic diarrhœa, it will be found that the blood is low, and usually impure. In nearly all cases there are nervous derangements. In a majority of them the liver is out of order; and in not a few cases the stomach is diseased and digestion impaired. It is not well, therefore, to resort simply to astringents. In many cases no more unfortunate result can be obtained than the arrest of the frequent passages while the causes remain undisturbed. As a rule, having few exceptions, those affected with chronic diarrhœa should have no astringent medicines whatever. The shutting up of this outlet of acrimonious matter, is liable to produce bilious or other fevers. Still, many imagine that if they can only stop the flux, all will be right with them; and acting upon this hypothesis, they ply their stomachs and bowels with astringent drugs, or allow an indiscreet doctor to do it for them. In any case of chronic diarrhœa, if the questions given on page 583 are answered, I can easily ascertain the cause or causes, and by removing that or them, effect a radical cure. All the astringents necessary may be obtained by a proper selection of food. Wheat-bread toast; cracker toast; boiled rice; rice gruel; baked potatoes; toast prepared with boiled milk; blackberries, fresh or canned; baked sweet apples; grape pulps, and the juice of the skins, without the seeds; black currants; brandy peaches; wild cherries; and any other wholesome vegetables and fruits, possessing mild binding qualities. Astringent drinks may also be prepared and used moderately. Rice scorched and prepared in the same way as we prepare the coffee berry; crust coffee; toast water; blackberry-jelly water; and diluted blackberry-brandy are all useful in chronic diarrhœa, if used with sufficient moderation, and not depended upon for effecting a cure.

Hemorrhoids, or Piles.

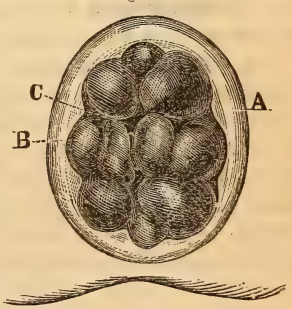
In introducing this essay, I will first explain that the rectum is the third and last portion of the large intestines, and was so named by the mistaken anatomists of old, under the supposition that this por-

tion of the gut was straight. The illustrations, figures 98 and 99, show just about how straight it actually is, and how erroneous it was to christen it after the Latin term *rectus!* As the name, however, does not give anybody any distress, we will turn our attention to those diseases of the rectum which do.

The most common affection of the rectum and its termination, is piles. All persons subject to constipation, or diarrhœa, are apt to be troubled with piles, and some have them who are not subject to irregularity of the bowels. Itching piles are those which often present no distinct elevations, but great irritation of the anus and sometimes a puffiness of the surrounding membranes. Then there are cases where an eruption of an itching character breaks out about the anus which may also be called itching piles. The most troublesome piles, however, are those of a tumorous and varicose nature, such as are represented in the annexed illustration, figure 101.

The arteries of the rectum are numerous, and whether the enlargements are simply varicose or tumorous, the blood presses in upon the affected parts, and alarming hemorrhages in some cases take place. I once had an interesting case of this kind, who before becoming my patient had for more than a year been subject to daily excessive hemorrhages from the rectum, and to such a frightful extent as to give her a deathlike paleness, and such weakness that she could with difficulty keep from her bed. Her friends despaired of her recovery after the failure of the family physician to relieve her. She was a Jewess, and her gratitude on being restored under my treatment found expression in the naming of her first-born after the author, who, by invitation, was present at the peculiar ceremony of circumcision. This was all contrary to the canons of the Jewish religion, which forbid the adoption of Christian names, and prohibit religious fellowship with those entertaining the Christian faith. But she insisted that Dr. F. had saved her life, and that the baby was the

Fig. 101.



TUMOROUS AND VARICOSE PILES AS THEY APPEAR IN THE ANUS.

A, anal rim or sphincter muscle which holds the tumors tightly after they are extended; B, piles formed of swollen mucous membrane and enlarged vessels; C, anal aperture.

offspring of her recovery, and the opposition of her friends to the course she chose to pursue, did not prevail.

The *immediate* cause of piles may be briefly given as every thing which tends to irritate or unduly heat the anus or rectum. Hard fecal plugs, and watery and scalding stools may induce an attack of piles. Considering the vascularity of the rectum, it is frightful to think of a large dry fecal plug, as hard and irregular as a stone, descending the rectum, scratching and pushing along, abrading the lining in one place, and so distending it in another that the blood actually exudes from the congested membrane. But there are those who are so ignorant of the peculiar structure of the rectum that they allow constipation to produce these fecal plugs which are thrown off every few days for weeks and months. until the most obstinate diseases of the rectum are induced.

Carelessness in the selection of instruments for cleansing the parts after stool often induces irritation which develops piles. This evil is so excessively prevalent, particularly in rural districts, that I must beg the indulgence of the reader for a moment while I call attention to it. Nothing is more common than to find in the "little-house" of a farm-yard, a huge pile of corn-cobs for the purpose indicated. Even chips are sometimes resorted to. Now, to frictionize the external skin with a harsh substance like either of those, would be sufficient to produce eruptions or sores upon any one affected with blood impurities; but applied to the delicate membrane of the anus, no one addicted to the practice can escape having piles unless his blood is remarkably pure. Leaves of plants are often used with like results. The leaves of almost all descriptions of vegetation are more or less bearded or coated with a kind of fuzz which, when brought in contact with the mucous membrane, causes irritation. Coarse brown paper is nearly as unsuitable, inasmuch as it is too rough and harsh, while newspaper is equally objectionable, because of the irritating properties of the ink with which it is printed. It would be well if all would regard this matter of sufficient importance to provide themselves with paper which is manufactured and sold expressly for the purpose. If not, only the softest, and most pliable brown paper, such as would answer to wipe the mouth or nose in the absence of a handkerchief, should be employed.

People of sedentary habits should also be guarded as to what they use for seats. Sitting in cushioned chairs covered with worsted;

enameled cloth, or other heating material, tends to produce irritation in the anus. If a person is at all predisposed to piles, cane-seated chairs are far preferable to any other, and a wood-bottomed chair is decidedly better than one that is luxuriously upholstered.

The predisposing cause of piles is invariably impure blood. The rectum may be lacerated with dry, unyielding fæces; the anus may be frictionized with corn-cobs, chips, leaves, and rough paper; in brief, it may be irritated and heated in all varieties of ways, and not any permanent difficulty in the form of piles be developed, unless the blood possesses humoral properties, which may be diverted to the abused parts. On the other hand, the blood may be in an exceedingly impure state, and the development of piles be generally averted, if the immediate causes I have named are avoided. Prevention is the best remedy, but when this fails, do not be reckless in the choice of remedies to effect a cure. It is not safe to resort to local discutients; many a life has been sacrificed by pile ointments and salves. The use of such remedies only tends to drive the impurities to vital parts of the system. Piles, unless induced by bad habits, are only "angels of mercy," for the vitiated properties of the blood giving rise to them, would have surely attacked some vital organ, if they had not located in the anus and rectum. The only local treatment at all admissible is electricity. This may be applied directly from an electro-magnetic machine, or in the form of electrical embrocations, or ointments. But this local treatment should be accompanied with constitutional remedies to remove the predisposing *cause* or causes. My electrical apparatus for treating piles is the most complete thing that has been invented for the purpose. But I seldom meet with a case that does not need blood-purifying and nutritious medicines, to aid in effecting a cure. With these remedies combined, I seldom fail to effect a cure in every case, not too far advanced in years, that presents itself, whether the patient has the advantage of treatment with my Magnetic-stool, or, living at a distance, adopts a course of my electrical medication. Those of my readers afflicted with piles, who cannot consult me personally, are referred to pages 299 and 574.

The most skillful treatment, however, is liable to fail in any case, unless proper attention is paid to personal habits. I have already spoken of constipation, and advised means for overcoming the difficulty, in an essay devoted to that subject; but the importance of

avoiding a constipated condition of the bowels is so essential to success in removing hemorrhoidal affections, I must be pardoned for introducing matter here which may almost seem like repetition. First, and all-important, after giving attention to dietetic rules, is regularity in attending to the calls of nature. Every man, woman, and child should have a stated hour, from which he or she should reluctantly deviate if the house is on fire. Persons accustoming the bowels to move at a certain time each day, will find that organ ready to respond to his or her efforts, and they will further find that if they pass much beyond the usual time, constipation will exhibit itself.

Fig. 102.

The RECTUM laid open, to show its appearance when affected with Piles.

The habit many have, of reading or thinking intently on business or domestic affairs, of nursing griefs and taking a retrospect of a gloomy past, or in fact, of engaging the mind either in reflection or diversion, while at stool, tends to retard the bowels in the exercise of their functions, and consequently produces constipation. The "Harbinger of Health" very sensibly gives utterance to the following language on the subject: "Any mental occupation foreign to the proper and prompt performance of the function, is positively certain to stamp the impress of disease upon the weakest part; and, inasmuch as, while engaged in this particular function, the vessels and fibres of the rectum are distended and principally taxed, so is inattention at the time most likely to produce one or more of the above-mentioned forms of hemorrhoidal disturbances." By concentrating the will upon the parts which expel the fæces, costive persons will find it much easier to relieve themselves of excrementitious matter.

Prominent among the remedial exercises suited to persons affected with piles, is horseback-riding. The jolting of the diseased parts upon the saddle, quickens circulation, and helps thereby to relieve congestion, and when piles are tumorous, it promotes absorption. Theodore Parker once facetiously remarked that the "outside of a horse is good for the inside of a man." This was said, of course, with more especial reference to dyspeptics and those who do not

take much exercise, for the outside of a horse is equally good for the outside of a man. Ladies would be quite as much benefited by horseback-riding as gentlemen, if they would invent some costume which would enable them to ride gracefully astride. It is questionable whether they derive any greater advantages from equestrian exercise than exhilarating joltings and the breathing of the pure atmosphere of heaven. Their cramped-up position on the saddle does not allow a free and easy play of the muscles, such as gentlemen experience with both feet in the stirrups, and presenting an untwisted front. Women have yet to work a reform in this matter. There is no good reason why a lady should put one of her limbs to sleep over the pommel, and occupy a distorted position every time she takes a horseback-ride. While fashion may treat with scorn and contempt the suggestion that a woman should ride astride like a man, common sense cries out against the present ridiculous custom.

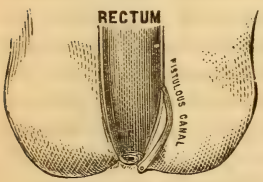
For external piles, and especially those of a varicose nature, or falling of the rectum, the Pile Compresser (see page 911) yields great relief and comfort. The effect of the wearing of this ingenious instrument in cases of external piles, is very similar to that produced by frequent horseback-riding. The continuous gentle pressure of the congested parts serves to relieve them of their painful and sometimes unendurable distention, and to induce a more natural circulation of the blood in them. For those who have not the time or means to indulge in equestrian exercise, and particularly for ladies who are compelled by King Custom to so seat themselves on the saddle as to derive little advantage therefrom, the Pile Compresser is invaluable. Even if under skillful treatment for the removal of both the disease and its cause, something is needed to give relief while the good work is going on, for piles cannot be permanently cured in a few weeks under any system of treatment, unless driven in by injudicious local embrocations. Then, there are persons advanced in life, who cannot be cured, and who, consequently, require something to render them comfortable. To such I would most urgently recommend the Pile Compresser; while those of all ages, suffering with falling of the rectum or bowel who adopt it, will pronounce this mechanical invention an inestimable blessing.

Fistula in Ano

Is a troublesome and dangerous affection, which is liable to result from neglected or badly treated piles. It may also occur in persons

of scrofulous diathesis without the provocation of any previous disease in the anus or rectum. It commences not far from the anus, and usually announces its approach by itching, or pain, or uneasiness, although in some cases no unpleasant symptom is experienced until it begins to discharge its purulent matter, and then this discharge may be the only evidence of its existence. So long as it has but one opening it is called incomplete, but when the abscess has proceeded so far as to penetrate the rectum, or any other cavity, it is said to be complete. The annexed cut, figure 103, represents a complete fistula in ano. Sometimes it has several openings into the rectum or other parts, and the canal is in some cases so complete as to have a lining almost like the mucous membrane. I once had a case of fistula which opened perfect communication between the rectum and the urethra, so that at stool some of the fluid portion of the fæces passed out of the mouth of the penis. When the abscess is active, large quantities of purulent matter issue therefrom, especially at stool when it is pressed by the descending fæces. When much inflammation is present the affection is terribly painful.

Fig. 103.



COMPLETE FISTULA IN ANO.

In all cases of fistula, the blood should receive the first attention of the physician, and the knife should be the last resort, because if the latter be employed, it still remains necessary to purify the blood, or the fistula, or an abscess of some kind will return. It would consequently seem the more sensible plan in all cases, to have suitable blood-treatment at the outset. This may suffice to cure the difficulty. If it does not, neither time nor money will have been unnecessarily wasted, because the constitutional treatment cannot be safely dispensed with, however successful the operation. I have succeeded in curing fistula in ano, with blood-purifying medicines alone, after noted surgeons had expressed a decided opinion that nothing but the knife could possibly remove the local affection.

Stricture of the Rectum

Is an annoying and generally painful affection which may result from neglected or badly treated piles, local inflammation, bungling operations for fistula, or any thing which causes an abrasion or great

irritation in the lining of the canal. The stricture may consist of a thickening of the walls of the rectum, causing a partial obliteration of the canal; adhesion of some portions of the walls, after the healing of abrasions or abscesses; or it may be caused by indolent tumors forming therein, or remaining after a severe attack of piles. Stricture of the rectum is a most troublesome difficulty, because it obstructs the passage of the excrementitious matter, and in some cases to such a degree as to prove fatal. The symptoms attending stricture in this locality are—difficulty in passing fæces even when they are soft and pliable; passage of fæces in small fragments, sometimes streaked with blood; and, when caused by thickening of the walls of the rectum, the expulsion of narrow flattened fæces. In a case of stricture of the rectum, both constitutional and local treatment are necessary, and the patient cannot do better than to rely wholly upon the advice of the physician in whom he may entertain confidence. In cases living at a distance, the author can give such directions as will enable the patient to administer the necessary local treatment himself, or herself.

Falling of the Rectum.

The technical name given to this troublesome affection is prolapsus ani. It consists of a falling or protrusion of the bowels. In some cases of this kind the lining of the rectum protrudes constantly; and in others it only descends at stool. Neglected piles are usually the immediate cause of this difficulty; but in nearly all cases there is great weakness, and in some complete paralysis of the sphincter muscle, or that ring-like muscle which encircles the anus, and which in health closes the orifice at all times except when the excrementitious matters are being expelled. In a case of prolapsus ani the falling of the bowels should be returned carefully by manipulation, and the use of some soothing ointment, or common oil, to soften the swollen and congested parts while they are being placed back. Then a pile compresser (see page 911), should be adjusted, and treatment at once adopted calculated to strengthen the sphincter muscle, stimulate healthful circulation in the lining of the rectum, and to remove whatever may be the inciting cause.

Ulceration of the Bowels.

Ulcerations are liable to take place in any part of the body when any thing like a scrofulous or a syphilitic taint exists in the system.

These ulcerations may occur in the intestines, giving rise to a multitude of painful symptoms. Of course, any thing which so far affects the intestinal canal as to interfere with the free discharge of fecal matter must, unless removed, ultimately prove fatal. It is necessary to take food into the system daily, and it is equally as necessary to have a diurnal removal of that which is innutritious, and also of the waste secretions which are cast into the intestinal reservoir, called the colon. It is practically no worse to have ulcerations of the mouth and of the canal called the œsophagus, leading to the stomach, so that a person cannot easily take nourishment, than to have those ulcers in the fecal sewers, causing by their presence the waste matters—the ashes and clinkers—to be disposed of with difficulty. In all cases of ulceration of the bowels, if inflammation attends it, there are sensations of heat or pain; tenderness on pressure; and copious discharges of ulcerous matter mixed with blood, which usually passes off at stool, preceding or mixing with the fæces. The latter symptom occurs if the ulceration be not attended with inflammation.

As it is not possible for ulceration to take place in any part of the system unless the blood is badly affected with impurity, the predisposing cause points with unerring directness to the remedy, which lies in the entire renovation of the vascular fluids. In my practice, in the treatment of this class of invalids, I aim directly at the blood, and usually my advice and medicines are successful. An interesting case is presented in the extracts of letters, see page 594.

Intestinal Worms.

It is not pleasant to think of, but a fact that must be stated in this chapter, that the human family, in a state of civilization, is apt to be wormy, and that the residence of these worms is usually in the stomach or intestines. The wild men of the forest, uncontaminated by civilization, are not subject to them, which may easily enough be accounted for. They live so naturally, that their vascular fluids and animal fibres are too healthy to encourage the presence of parasites. Long thread-worms, round and white, from one to two inches in length; knots and balls of pin-worms, little fellows almost requiring the microscope to see the smallest specimens; long, round worms, from two to fourteen inches in length, sometimes pale, and at others a deep red; liver-worms, an inch or over in length, flat, with all the

various colors of the bile, thrown off from the gall bladder; and tape-worms, flat in shape, in complexion usually white, jointed like so many small pumpkin seeds attached with a thread, and in length sometimes twenty feet, are found in the intestines of men, women, and children. The most common afflictions of this character are pin-worms, which infest the rectum, pay visits to the anus, and create an unendurable itching by their pranks. To the microscopic world the rectum is as large as the State of New York, and these pin-worms are as formidable as boa constrictors, while they twist and flounder about more actively than the huge creatures alluded to.

The same rule that governs trichinæ appertains to intestinal worms, so far as their generation and encouragement in the body is concerned. All such vermin can only exist in systems wherein the blood is sufficiently impure to nourish them with its corruption. It is plain, therefore, that the only way in which they can be permanently exterminated is by making the blood too pure for them. Restore the purity of the blood, and they will die out by actual starvation; for it is not the waste matters of the system, but the unwholesome secretions of the mucous membrane which feed them.

Treatment of Diseases Presented in this Chapter.—As I have in each essay given appropriate suggestions as to the best course to be pursued for the successful management of the diseases under consideration, it would be mere repetition to present them here. I will therefore refer readers who are affected with any of them, to the chapter on the Treatment of Disease, page 574. This chapter will be found interesting and suggestive. Before concluding the author will simply remark, that he does not claim by any means to have treated upon all the chronic diseases which are found to affect the liver, stomach, and bowels. It seems hardly necessary to occupy space with more than those commonly met with in medical practice. Invalids having symptoms leading them to suppose that they are affected with any of them, or with other chronic diseases of these organs, are at liberty to present their cases to the author in person or by letter.

CHAPTER IV.

ACHES AND PAINS.

IF all the aches and pains that afflict a few people, were distributed among the many, there would be one constant ache apiece for everybody, including the domestic animals of the household. There are as many heart-aches among young misses, as there are headaches among the matrons; and as many back-aches among dissipated young men, as there are brain-aches in the counting-rooms of opulent merchants, or the offices of overworked lawyers. There are, in brief, acres of aches on either side of life's pathway. It is necessary to walk a line as narrow as a crack to avoid them.

Then, of pains, how many of them are so concentrated, so double-distilled, that one person could spare enough to set a whole family in contortions, and not cease himself to make involuntary grimaces at the contented cat under the table, or the complaisant dog on the door-step; nor hesitate to wish he had been born feline or canine. Considering, therefore, the quantity and concentrated quality of the pains, and the variety of the aches which afflict humanity, the author shrinks from any attempt in this chapter to circumvent many of them, and will consequently content himself to speak of less than half a dozen of those most commonly met with in every-day life, while promising to give his attention unremittingly in practice to the alleviation of aches and pains of every description.

Bilious Headache.

Had I not recently heard of a child just born out West without a visible head—the mouth, breathing passages, and eyes being located in the chest—I should start out in this essay with the unqualified statement that nobody ever lived without sometime having had

headache. As the child alluded to must be an exception, and, as there may have been other children born in the same likeness, to say nothing of some people who behave very much as if they were headless, I must limit my statistical assertion by saying that all having visible heads, and, with heads, symptoms of brains, have had, and are liable to have, headache, if they live conformably to the conventionalities of the civilized portion of our planet.

Bilious headache is the most common. What produces it? I can tell you in a few words. The liver in health extracts from the blood certain properties which, when collected together, constitute bile—a carbonaceous, soapy compound which, poured into the duodenum, becomes one of the agents of digestion, as described in the beginning of the foregoing chapter. When, therefore, the liver becomes so diseased as not to do this, the blood becomes loaded with these bilious properties, and the digestion becomes in a measure impaired. These irritating matters in the blood visit the head as well as other portions of the body, and coming within sensible contact with the delicate nerves therein, cause irritations which make themselves felt in the form of aches; and these aches are aggravated by the disturbed digestion ensuing from the absence of the bilious properties from the lower stomach. The bile is just where it is not wanted. In the duodenum it is useful; in the circulation it is a mischief-maker; and while neglecting its own business, it is meddling with that of others; a result not unfrequently met with when people do not attend to their own affairs.

Fig. 104.

HEADACHE.

There is still another way in which bilious headache of a periodical kind may be produced. In some constitutions, the accumulation of bile in the circulation causes little else but drowsiness or heaviness, until all at once a crisis arrives,

the liver suddenly awakens from its inaction, and takes up and pours into the lower stomach, bile in such immoderate quantities as to irritate the duodenum, causing it to contract and eject quantities of the irritating fluid into the upper stomach where the food is first received after passing the mouth and the œsophagus. The presence of this intruder causes intolerable nausea or sickness, and such a disturbance of the stomach nerves, that the nerves of the head become involved, producing what is commonly called sick-headache, which usually continues until relief is obtained by vomiting. When the bile is entirely removed from the stomach by this effort, the headache disappears. If in any case, or at any time, the duodenum can prevent this reverse action, and carry the deluge of bilious matter downward into the intestines, bilious diarrhœa instead of headache takes place. It is for this reason that some persons subject to sick-headache are also liable to bilious diarrhœa, and it will be noticed in such cases that the attack of headache passes by, or presents itself very slightly, when the bilious matter takes this course.

Nearly all persons subject to bilious headache have sallow complexions derived from the influence of the bilious matter in the circulation, and usually, too, they are greatly annoyed with drowsiness during the day, and with a predisposition to restlessness at night; while those who do drop off to sleep without difficulty awaken in the morning with the remark, that they have slept too soundly, and feel uncomfortably in consequence. Bad tasting, bitter mouth, also frequently contributes to the discomfort of bilious people, because the blood, overloaded with bile, allows some of these bitter, nauseous properties to sweat through the mucous membrane lining the mouth and stomach as well as through the external skin; and when the coatings of the stomach are covered with this unwholesome secretion, the tongue usually presents a yellow, furred appearance. This internal bilious perspiration often destroys the purity of the breath, just as the external perspiration in such cases renders the effluvium disagreeable; but the latter is not so readily noticed because it passes off more diffusively from the whole surface of the body, while the former is thrown out with each exhalation in a concentrated stream from the breathing passages.

No person need suffer with bilious headache. Because it is not regarded fatal, many people who pay thousands of dollars for fine houses, nice furniture, sumptuous tables, and other creature com-

forts, go through life with this discomfort, which greatly disqualifies them for the enjoyment of the things they provide so lavishly for the enjoyment of themselves and friends. If they would stop for a moment to reflect upon it, they would see how much more they would enjoy were they to drop off a few superfluities, if necessary, and make an appropriation for "internal improvements;" for, notwithstanding all political wrangles on this topic, I can confidently assure them that in all cases of this kind, it is strictly "constitutional." A little attention to the *liv-er* as well as the *liv-ing* would result in greater comfort and happiness than is now enjoyed by thousands in all conditions of life. Those persons laboring under a predisposition to bilious headache, who accept this proposition, are commended to a perusal of the essay on the liver in the preceding chapter.

Nervous Headache.

It is seldom that headache exists without liver derangements; but cases occur in which the difficulty arises purely from nervous disturbances. Incipient neuralgia may present all the symptoms of nervous headache. The affection of the nerves not having proceeded far enough to induce irritation or inflammation sufficient to cause distinct neuralgic pains, the sensations are those which are best described by the term *ache*. Overworked brain may induce nervous headache, or establish a predisposition to its attacks. The nerves as well as the muscles may be overstrained by over-exercise, and in such cases they will cry out, and their voice will be an ache or a pain. The brain actually swells in some cases from over-exercise. I have had for patients authors and professional men and women, whose main difficulty might with propriety be called *swelled brain*. Overwork of any particular part or organ of the body may bring about inflammation and congestion, and consequently enlargement. The brain is not an exception to this rule, and when it is thus affected, the bony frame-work called the skull, will not allow much expansion of its contents, in consequence of which a sense of great pressure and aching will be experienced, together with labored pulsation of its arteries. This sense of pressure is more often experienced in the top of the head than elsewhere, but sometimes there seems to be a sense of pressure throughout the brain.

People not subject to neuralgia, or given to excessive mental

labor, may in some instances be predisposed to nervous headache. Grief, disappointment, and other excessive mental emotions may occasion it; too much use of the eyes may induce it; when the optic nerve is weak or irritable, sunlight or gaslight may bring on an attack; if the auditory or hearing nerves are much affected, disagreeable noises may cause nervous headache; an affection of the spine may predispose a person to it; morbid conditions of the procreative organs of both sexes are liable to disorder the brain and develop a tendency to headache; and, lastly, it may be caused by a bad circulation of the nervous forces, or a deficiency of them. In the latter case when nervous vitality is low, the brain lacks strength and becomes tired by the slightest care, or the most ordinary thinking, just as the limbs, when weak, may become so tired by a little walking as to ache like toothache when the person so affected sits or lies down after exercise. For nervous headache there is nothing so salutary as the kind of medication referred to on page 299.

Congestive Headache.

This kind of headache is most liable to affect people who are fleshy and full-blooded. The arteries and veins of those who are so fat that their skins are stuffed to their fullest capacity of expansion, are often so crowded as to circulate the blood very sluggishly, and in such cases the head is liable to ache from the presence of too much sluggishly moving blood. When a person thus affected stoops over, the head swims on assuming an upright position; and when headache is constantly present, there is experienced a sense of fullness; a predisposition to vertigo; and, in some cases, throbbing in the temples and over the eyes. People thus affected should pursue a course of medication calculated to thin the blood; and pursue a course of dietetics and exercise calculated to reduce the plethora.

In lean persons, congestive headache is sometimes a troublesome companion, proceeding from an imperfect circulation. In these cases, while the extremities are cold, and the veins in them almost collapsed by the absence of the vascular fluids, the brain is unduly supplied and pressed with blood. A good remedy for this is given in the essay for keeping the feet warm, in the chapter on the prevention of disease.

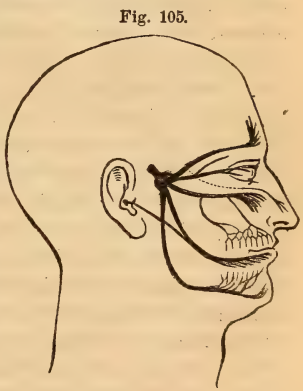
Women are sometimes victims of periodical attacks of congestive headache when they are subject to menstrual derangements. The

blood, instead of flowing off at the proper period, determines to the head and face, giving to the latter a flushed or florid appearance, and to the former a sense of pressure which often amounts to severe headache. Women are especially liable to these attacks, when the function, generally known by the name of the "monthly flow," is just about being established; and when that period arrives in older womanhood, commonly called "change of life;" but there are those who suffer at every recurrence of the menses, with flushed face and congestive headache. The only remedy is, of course, to give such medical attention to the ovaries and womb, and to the extremities if cold, as will eradicate the causes. It is hardly necessary to say that menstrual difficulties proceed from disease, and are natural to no one. In women of health the flow will come on with little or no warning in the way of pain, and at the age for it to cease, it will simply fail to appear, with no symptom whatever of discomfort.

Neuralgia.

Neuralgia is a disease of the nerves, and may affect any part of the nervous system, although it most commonly attacks the nerves of the face, jaws, breast, and feet. Its presence is announced by the most piercing, darting pains, recurring in paroxysms, followed with brief intervals of relief; but hardly a moment elapses after a lacerating pain darts along the course of the affected nerve, ere another shoots forth, inflicting pain equally distressing to the patient.

Fig. 105.



FACIAL NERVES.

The annexed cut presents in the prominent black lines the nerves of the fifth branch, which are most liable to attacks of neuralgia. Many a victim to the distressing disease will be able to recognize in those lines the tracks of the pains which so often afflict them.

The pathology of this disease is about as little understood by the medical profession as the science of aerial navigation. As well might a person look into patent-medicine almanacs, Robinson Crusoe, or the yellow-covered literature of the day, for a correct explana-

tion of the nature of the disease, as into the pages of medical publications. Medical authors generally attribute its cause to nervous debility. What is nervous debility? Why, it is simply a relaxed and enfeebled condition of the system resulting from an insufficient supply of nervous vitality. Persons so affected are troubled with lack of strength and want of vivacity or animation. Now every one knows that neuralgia is often found among persons of robust appearance, who have a fair degree of strength, and that it sometimes manifests itself in those possessing extraordinary muscular power and physical vigor. How can this fact be accounted for, if nervous debility be the cause?

Now, then, let us take a *common sense* view of the disease. An impure condition of the blood, or the presence in the system of some poisonous mineral, like mercury or lead, may cause inflammation in any nerve which the impurity or mineral may attack, and when the nerve is attacked by either, so that there is danger of the nervous communication being blocked up, the available nervous forces are gathered up and suddenly precipitated at intervals upon the obstructed nerve by the efforts of nature to keep the communication open. These violent propulsions of the nervous forces through the inflamed nerve, cause the sharp darting pains. Nature always attempts to get rid of any functional intruder. This is illustrated when something gets in the eye; a sudden gush of liquid from the tear-glands, attempts to carry it out. If something offensive to the olfactory nerves, or not suitable to breathe into the lungs, enters the nose, an involuntary sneeze takes place for its removal, or, at least, to prevent its entering the pulmonary organs. If the stomach is crammed with a mixture of unwholesome food, nature often visits upon the careless gormandizer a diarrhœa to carry it off. If corrosive or acrimonious secretions of the bronchial tubes roll down toward the air-vesicles of the lungs, a cough involuntarily takes place to bring them up. Now, all these efforts of nature to effect relief, may sometimes not only prove unavailing, but go too far, unless remedies are resorted to for the removal of the intrusion which she has faithfully tried to dispose of. The tears may flow too copiously or too continuously; the sneezing may become convulsive and painful; the diarrhœa may become excessive, continuous, and debilitating; and the cough may become rasping, exhaustive, and alarming. So with the precipitation of the nervous forces on the nerves at-

tacked by unwholesome humors or mineral poisons, which threaten to cut off communication through those nerves; it may become too painful, too continuous, and even threatening, unless remedies are adopted to assist nature in getting rid of the offensive visitors; but that natural effort, that sharp-shooting of the nervous forces through the invaded and inflamed nerves for the expulsion of the invaders, that, I say, is neuralgia. Neuralgia is a regular pitched battle between the forces circulating through the nerves and the offensive humors or minerals which attempt to obstruct their pathway, and when they are defeated, paralysis of the parts follows, for the nerves of sensation, or motion, or both, become lifeless when the passage of animal electrical currents is completely obstructed. Sometimes the warfare will be kept up for years, at intervals, unless something sensible is done to assist nature. The assistance needed, is readily suggested by a proper understanding of the disease as herein explained. If blood impurities are attacking the nerves, remedies suitable to cleanse and nourish the vascular fluid, must be taken by the patient at the same time electricity is being locally applied to relieve the painful paroxysms and the inflammation which has taken place in the affected nerve. If mineral poisons are lurking in the system and permeate the delicate nervous structure, the electro-chemical baths, skillfully administered, are necessary to remove the *cause*, and electrical applications or medication, according to the indications of the case, essential for a cure of the *effects*. The advances made in the science of electrical therapeutics have placed neuralgia in the list of curable diseases, notwithstanding the bigoted carpings of allopathic old fogies, many of whom even at this late day, deny its curability; and why? Simply because they have not been able, with their obtuse comprehension, to see into the occult science sufficiently to successfully employ it in the treatment of the more difficult ills which afflict mankind. I would refer those suffering with neuralgia to pages 299 and 574.

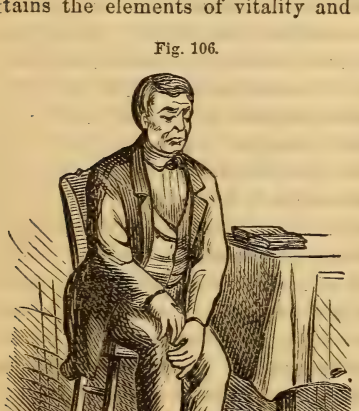
Rheumatism.

The theory of this disease has never been correctly explained by any one. In fact there is not even a show of plausibility in any of the written views of medical writers respecting its cause. As sensible a description of this painful affection as any that has fallen under my eye, was given some time ago in "All The Year Round." The

writer says—"Put your toe in a vice; turn the screw until you can bear the pain no longer; that is rheumatism. Give the screw one more turn—that is gout." When this book was first written, I, too, misled by popular errors, gave a very imperfect idea of the real nature of the disease, but my experience and success in treating it has, I am confident, suggested to my mind the correct pathology. In this revision I feel constrained to substitute a new essay for the old one, and in submitting it to my intelligent readers, I feel confident it will be accepted as rational and sensible.

It must be understood by the reader that the arterial blood contains the elements of vitality and nutrition, which it empties into what is called the capillary system. This capillary system is a kind of filterer of the blood, and after the nutritious particles have been filtered from the arterial fluid the latter is sucked up by the minute branches of the venous system, and carried back to the lungs for vital recuperation. Then the atoms of nutrition, composed of fluid bone, fluid muscle, etc., move by the laws of affinity to the various parts they are adapted to build up. Now, it so happens that through the effects of bad habits, bad medication, etc., this stream of blood emptied into and diffused through the capillary system is not always pure or free from inflammatory particles. There are corrupt and corrosive adulterations. What becomes of them? They, too, are emptied into the capillaries and are sucked up with the venous blood into the veins, so that they continue in the circulation, or else pass off with the insensible perspiration outwardly, or with the waste matter of the system inwardly. But the coagulation of several of these corrupt particles is apt to take place whenever the pores of the skin are closed by exposure to wet or cold or other causes, or the internal

Fig. 106.



RHEUMATISM.

drainage and sewerage are inactive. These coagulated particles of corrupt matter may make their appearance under the skin, producing pustules, scaly eruptions, or running sores. They may attack the skin called the mucous membrane, lining the throat, bronchia, stomach, and other cavities. They may locate about a nerve and induce neuralgia, as explained in the preceding essay, and—now we come to it—they may attach themselves to the arterial tubes and veins, large or small, and inflame them by their corrosive influence. Mercury often forms a part of these coagulated particles of acrimonious matter, and any other injurious mineral may do so. The lodgment of these and the inflammation they induce, render the channels of the blood sensitive, and the circulation of the vital current through these affected parts becomes painful, just as it is painful to drink when the throat is sore; to pass the fæces when the rectum is affected with piles; to pass the urine when the urethra is inflamed or otherwise diseased. What does nature do now? She sends blood in abundance to drench out or dislodge, if possible, these corrosive particles, and the parts become very red from the congestion or pressure of blood therein. This is called acute rheumatism. What if nature does not succeed in washing out these acrimonious atoms? She withdraws the undue supply of the blood from the parts, gives up the contest, and continues to perform the function of circulation as best she can, but the passage of the currents of blood through their affected channels still continues painful. This is called chronic rheumatism. When the seat of the affection changes in a single day, night, or hour, as it often does, then it is that these corrosive quicksands have been washed from one position to another. By a sudden dislodgment they may be carried by the circulation to some part far distant from the place they previously annoyed. Now, who will say that here is not, in few words, the whole philosophy of that painful disease called rheumatism?

As my successful treatment of the disease suggested the theory, the theory in turn points to the correct treatment. Any thing which will dislodge the corrupt particles, dissolve *and expel them from the system*, and purify the blood, will give permanent relief. Electricity well applied, in conjunction with the administration of blood-purifying medicines, will do this. Or electrical medication (see page 299) will usually do as well. Many think they are cured when the coagulated particles are merely dissolved and dispersed. But such

cures are never permanent. They must be expelled and the blood restored, or the corrosive particles will reunite whenever a sudden change in the weather or exposure to dampness closes again the pores or other avenues through which they escape; for so long as the blood remains impure, so long will the circulation, the insensible perspiration, the fæces, and urine be loaded with those which daily accumulate.

A careful regard to air, exercise, and diet, should be observed by the sufferer with chronic rheumatism. A dry atmosphere is of the utmost importance, and dry stove-heat is far preferable to the damp atmosphere out of doors on a rainy day. In dry weather, out-of-door exercise is of the utmost importance, and if the invalid is so badly affected as to preclude the possibility of walking, carriage riding should be resorted to. Animal diet is better than vegetables and fish, because it excites, in a greater degree, active electrical radiation. Pork should be eaten by no one, and should be particularly avoided by an invalid. Beef, mutton, lamb, and venison, are best adapted to the condition of the patient.

The Treatment of Aches and Pains of all kinds must depend upon the cause. Those having any of the affections named in the foregoing essays, or other pains or aches not treated of in this chapter, are referred to Chapter XIII. of this Part.

CHAPTER V.

AFFECTIONS OF THE EYES AND EARS.

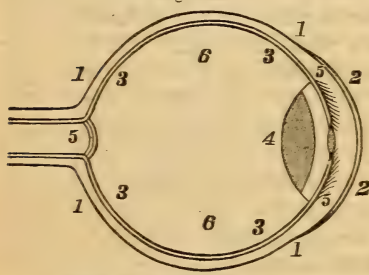
IT is no slight undertaking to get through this world with a pair of good eyes, and a brace of ready ears. Nor do those people get along very well who do not "keep their eyes and ears open." To have anything like a fair chance in love or trade, two eyes are as few as anybody can well do with. The schoolmaster, the man who enters Wall Street, the woman of great personal beauty, the widow of wealth, the reputed millionaire, and the mother of twelve children, need eyes all around them, and ears as long as those of that much abused animal which is accused of having had a hand in the invention of the mule. A medical work would therefore be incomplete without a chapter upon the affections of the eyes and ears.

Old Eyes.

When anybody begins to hold his book or newspaper at an unusual distance from him, it is said that his eyes are getting old. The difficulty is technically called presbyopia, and by some people "Far-sight;" but I have chosen for the title of this essay, "Old Eyes," as it will be better understood; and under it I will present some suggestions which will receive a cordial welcome by all sensible people whose eyesight is becoming impaired by age. Those who imagine that it adds to the dignified appearance of a lady or gentleman to have the eyes hidden behind convex glasses, and the head nearly encircled with golden bows, cannot be expected to pursue the subject of this essay with interest. Happily the latter class is in a decided minority compared with those who dislike the adoption of any and all paraphernalia indicating the approach of age and infirmity. If any species of vanity is excusable, it is that

which leads an individual to adopt every means science and art have provided, to overcome or even disguise the infirmities of age. If age is venerable, youth is *desirable* and admirable, and every one may be pardoned for striving to preserve vigor of eye and limb, and even the pristine beauty of skin and feature. Admiration irresistibly takes possession of the mind when we see an old person of either sex, who has preserved from infirmity the mental faculties and physical energies. And such persons are morally deserving of this admiration as a reward for having properly used and taken care of, instead of abused and neglected, the mysterious powers a good God has planted in the mind and body of his most perfect work—man. But that vanity which leads young persons to seek to appear prematurely infirm, gives positive evidence of their possession of one infirmity at least, *i. e.*, mental imbecility. If these premises are correct, we may logically conclude that the wearing of glasses or spectacles is certain evidence of infirmity. Either the eyes are defective or the mind is demented, and in the latter case, it would be better to incase the whole face in calf-skin than to merely hide the eyes behind transparent glass.

Fig. 107.



VERTICAL SECTION OF THE EYE.

1, 1, 1, 1, the sclerotic membrane, or what is usually called the white of the eye; 2, 2, the cornea; 3, 3, 3, 3, the retina; 4, crystalline lens; 5, 5, iris; the aqueous humor which forms the aqueous lens occupies the space between the iris, 5, 5, and the cornea, 2, 2; 6, 6, the posterior or back chamber of the eye, which is filled with the vitreous humor.

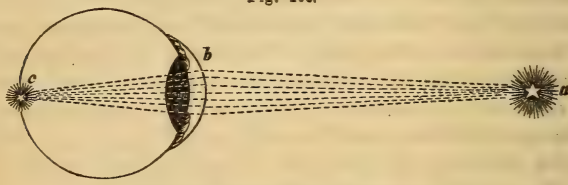
As yet unfortunately, science has revealed no certain means for the cure of the too great convexity or sharpness of the organs of vision, and therefore near-sighted people are entirely excusable for employing concave lenses to aid their imperfect vision; but when the fact becomes generally known that long-sight, requiring the use of convex lenses, such as old people wear, in most cases may be prevented or removed with very little expense and trouble, may we not hope that glasses will less frequently cover the eyes of people in middle and advanced life.

Before proceeding further with this subject, the non-professional

reader should be made acquainted with the organs of vision. What is the eye? What are its functions, and how does it perform the mysterious office of seeing? The human eye, taken as a whole, may be regarded as a globe; and although it cannot, like the planet, be divided into eastern and western hemispheres, it may nevertheless be divided into hemispheres which are subject to many subdivisions. The several parts of the eye necessary to be defined for the purposes of this essay are the sclerotic covering of the globe, to which should be added the cornea, the two lenses—aqueous and crystalline—the vitreous humor, the retina, and the optic nerve. Reference to figure 107, and its explanations, will enable the reader to learn the location of these. The sclerotic is a firm, fibrous, opaque, or untransparent membrane, covering and protecting four fifths of the globe, while the cornea, of a dark hue, covers and protects the balance, or front, central portion of the globe. At the center of the cornea is a transparency of the size of, or perhaps somewhat larger than, a pin's head, through which light is admitted into the dark chamber of the eye. This cornea also forms the anterior or front capsule of the aqueous lens, convex in form, so as to converge or bring together the rays of light as they pass this medium more dense than the atmosphere. Behind the aqueous or fluid lens is located the crystalline lens, the capsules of which are of a firm, delicate, transparent texture, and its face convex, so as to still more converge or bring together the rays of light which have passed through the aqueous lens. The retina lies in the posterior or back hemisphere of the globe, as represented in figure 107, and presents a concave or hollow surface, upon which to receive rays of light, giving the form or image of any object the eyes are turned upon. If the two lenses—aqueous and crystalline, are neither too greatly nor too slightly convex, a perfect image of any object presented, is daguerreotyped on the retina, as represented in figure 108. If too convex, the image is formed before it reaches the retina, as shown in figure 109, and the person is near-sighted, so that objects must be held close to the eye to throw the image far enough back to produce the perfect picture on the retina; if flattened or not sufficiently convex, the retina is not far enough back to receive a perfect image of near objects, and the latter must be removed away a suitable distance, to have the picture of the image fall correctly on the retina (see figure 110.) Persons thus affected are long-sighted, and their eyes are *said* to be impaired by age.

It remains to speak of the optic nerve. This nerve is attached to the retina, or more properly speaking, the retina is a continuation or expansion of the optic nerve. It perforates the sclerotic back of the eye, enters the cranium and connects with the sensorium, by means of which, as by a telegraph wire, intelligence is communicated to the brain of the various images which are from time to time formed

Fig. 108.



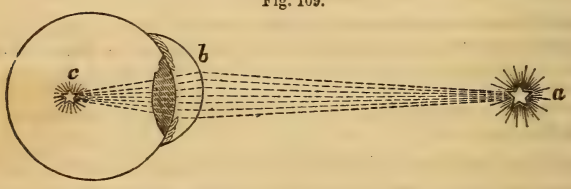
AN EYE WITH PROPER CONVEXITY.

a, is the object seen; *b*, the cornea, which catches the rays of light reflecting the image of the object; *c*, the image properly focalized on the retina.

on the retina, and made mysteriously to pass before the mind's eye. So far, we are allowed to understand how vision is effected; but after having fully pursued the philosophy of the *material* we come to the *spiritual*, and here philosophy must end and faith begin.

Now, the several parts of the eye when put together, form an optical instrument—a mechanical machine—which will perform its

Fig. 109.



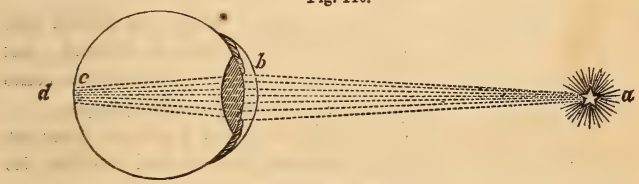
TOO GREAT CONVEXITY, OR SHARPNESS OF THE CORNEA.

a, object; *b*, the too convex, or sharp, cornea; *c*, the rays of light converged, or focalized, forming the image before reaching the retina. A person so affected is called near-sighted.

functions after death, and, what is still more mysterious, after the globe has been removed from its socket. Hence it is perceived the eye is so organized as to receive and converge, or draw near together the rays of light, and thus perform the office of glass-lens. Place the convex surface of a lens to the solar rays, and those rays will be refracted, converged, or in plainer words, bent toward each other,

till they finally reach a focus behind the lens at a greater or less distance in proportion to its convexity; the more convex the sooner they will be brought together; the less convex the more remotely will they touch each other. A glass with a flat surface will not alter the direction of the rays of light, and if the eyes were flat, they could not receive the image of any object unless they were as large as the object itself. For instance, to see an elephant near by, the eyes would need to be as large as an elephant; and to see a building, as large as the building itself. Now, every one can see without eyes that it would be inconvenient to carry around such immense organs of vision! A concave glass refracts the rays asunder, and were the eyes to be concave, the retina would not be large enough to receive the image of an object. It will therefore be perceived that the lenses of the eyes should possess just the right degree of convexity.

Fig. 110.



CORNEA TOO FLAT.

a, the object; *b*, the cornea, too flat to converge or draw together the rays of light reflecting the image of the object sufficiently to form the focus on the retina; *c*, is where the image should be formed, but *d*, is where the image would fall if the retina were there to receive it. A person thus affected is called long-sighted. Most old people have this difficulty, and they can, consequently, discern objects at a distance better than they can those near by.

Nature, the greatest of architects, in the structure of the eye seldom makes mistakes. We occasionally meet with those whose eyes are too convex, and who, as a consequence, are what is called near-sighted; but when the lenses of the eye are too flat for correct vision, it may generally be regarded as the result of artificial means, such as rubbing the eyes from the nose outwardly, either in washing or in frictionizing them when irritated. The theory that it is occasioned by physical decay has been exploded by modern philosophers, and has been and can be proven to be false. John Quincy Adams preserved the convexity and perfectness of his sight till his death (and he died at eighty-one) by pursuing from early age, the

habit of frequently washing the eyes and making the manipulations in so doing, toward instead of from the bridge of the nose. There are multitudes of cases of men retaining perfect vision after the ravages of time have crippled all the other organs and faculties. Some authors claim that presbyopia, or long-sight, is often induced by age diminishing the quantity of the aqueous humor, but the fact is, that as the aqueous humor decreases in quantity, it increases in density, and, inasmuch as increase in density adds to its refractive power what may be lost by the lens becoming less convex, is made up by its denser quality, so that the perfectness of the vision is retained. It is in consequence of this humor being rarer or denser, according to its quantity, that a large and small eye of equal convexity may distinguish objects equally well. By this explanation, too, the return of the sight may be accounted for in some old people who, after years of long-sightedness, requiring the constant use of convex glasses, gradually regain their sight. The rubbing of the eyeballs in the wrong direction from childhood, flattens the cornea, and then sight becomes defective. But old age brings density to the aqueous humor, and the old eyes become as good as new.

From the foregoing it appears evident that all that is required to preserve the sight in perfection till death, unless accident or disease destroys the structure or paralyzes the nerves of the visual organs, is to sustain the convex form of the eye. Whether or not, simply care as to the manner and direction of manipulating it from childhood to age be sufficient to do this in all cases, is not only uncertain, but, if certain, could prove of no very great practical benefit to the present generation. Correct manipulations can neither save the convexity of the eyes of those who are just becoming long-sighted, nor restore those who are already laboring under the infirmity. To reap the benefit of such a custom in middle or advanced life, it must have been adopted in the nursery—learned with the A B C, and followed up with the persistency which characterizes habits generally. Its influence is not sufficiently marked to restore convexity to the eyes of those already beginning to experience the inconvenience of flattened lenses. They require something more potent—something which will produce more immediate results. Knowledge regarding the tendency of right and wrong manipulations, is of value to those who have not yet emerged from childhood, and parents should instruct their children according to the hints herein given. Knowl-

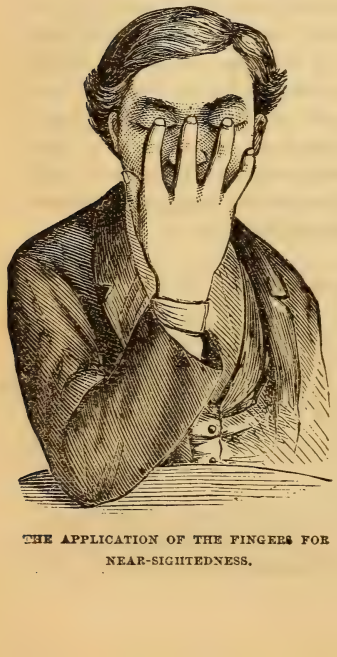
edge of this kind will also be serviceable to those who regain the convexity of their organs of sight, for art appears ready to come to the rescue of those whose vision is already impaired or becoming so. We have knife-sharpeners, scissors-sharpeners, and pencil-sharpeners, and why not have eye-sharpeners? Every part of the human organism is susceptible to physical impressions, except the large bones of the osseous structure. Ladies, by wearing tight clothing about the waist, acquire small waists; the constant wearing of garters makes an indentation in the flesh of the limb, which is noticeable after death; tight-fitting shoes make small feet, as is illustrated by the habits and physical characteristics of the Chinese; tight-fitting rings worn long on the finger, produce ineffaceable evidence of their having been worn; the common practice of Germans, especially in their "fader land," of carrying burdens on their heads, has undoubtedly something to do with the proverbial flatness of their craniums; children who get into the habit of reclining exclusively on one side, exhibit the effects in formation of the face and head; the infants of mothers who can only nurse them from one breast, are liable to grow up with a depression of that side of the face and head which came next to the breast during the months they derived their nourishment from the mother; the hair will curl if done up in papers or twisted around the curling iron; naturally curly hair, unless we except that incorrigible sort which grows on the head of an Ethiopian, becomes straightened by combing and brushing persistently for a time. Now, it is equally true that physical impressions may be made on the human eye, and that it can, with a suitable instrument, be restored to its proper convexity. This is no mere theory but a fact demonstrated by the experience of thousands who have, after years of slavery to glasses, been emancipated through the agency of a simple mechanical invention. The use of it is perfectly harmless, and can in no way whatever injure the visual organs. The trouble of employing it, is nothing compared with the daily annoyance of glasses, nor is its daily use necessary after a few months, according to the length of time the eye has been flattening. Only a very few applications are necessary for those who are just beginning to think it advisable to adopt spectacles. I would most urgently commend this instrument to such persons before they become slaves to glasses, for artificial lenses are liable to be laid down anywhere, and at any place, to the most aggravating inconvenience of the wearer, while

the natural lenses, if carefully preserved, are always where they are wanted, and never left at home, or the office, or workshop. Those who are already enslaved to the spectacle-makers, will need no urging to induce them to avail themselves of the discoveries of science and art, to overcome their optical infirmity. However defective their vision, their eyes will not become tired of reading this essay, which they will peruse, from beginning to end, with eagerness and pleasure, and hail with gratitude their deliverer. A complete history of this remarkable instrument, together with the testimony of many who have employed it, interesting to all who wear glasses, is given in a pamphlet—"Old Eyes made New." (See page 912.) Enough letters commendatory of its utility have been received to fill every page of this book, and in the place above referred to, a few will be given as fair specimens of the many in the hands of the author.

Near-sight, or Myopia.

The foregoing essay gives little but discouragement to a large class of people who are affected with near-sight. Since I first introduced the instrument for restoring far-sight, many years ago, I have been called upon by swarms of pretending inventors—some greedy—others addle-pated—having in their hands some device for flattening the eye. Of course it is not logical to say that side pressure upon the eye will impart convexity, while a flat pressure upon the face of the same, will not result in causing less convexity; but there are two objections to the use of instruments for flattening the cornea in cases of near-sight. *First:* near-sight is in nearly all cases congenital. In other words, those so affected, were born with just such eyes, and consequently it is more diffi-

Fig. 111.



THE APPLICATION OF THE FINGERS FOR NEAR-SIGHTEDNESS.

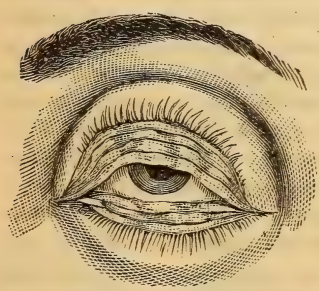
cult to *change* nature by attempting to flatten such eyes, than it is to *restore* to convexity those which were originally right, but have become flattened by age or bad manipulations. *Second:* no instrument can be devised for producing pressure upon the face of the eye, so complete as the balls of the fingers. I do not by any means deny the utility of pressure upon the face of the eye in cases of near-sight; I only call in question the merit of any mechanical instrument for that purpose, while reminding all near-sighted persons that they cannot expect as much nor as speedy benefit from this flattening pressure, as far-sighted people receive from the means I have devised for restoring the convexity of the eye. Every one having a particle of discrimination can see this; but were I near-sighted my fingers should always be employed, in my leisure moments, by placing the ball of the first finger of my right hand on my right eye; the next one on the bridge of the nose to steady the hand; and the third on the left eye—both eyes being closed. With the elbow resting on a table, and the head slightly bent forward to give an easy position, you have in this way, near-sighted reader, the best instrument ever devised for improving your vision, and I would urgently advise you to adopt it and use it perseveringly every day, though you may perceive no change for the better in three months. In time it will affect your sight favorably, and you might as well substitute a habit of thus pressing your eyes, for some other habit which you are conscious injures you—smoking, perhaps. The pressure may be gentle, and continued at each sitting for fifteen or twenty minutes. Illustration, figure 111 represents the position the fingers should occupy in the act of imparting this pressure.

Chronic Sore Eyes.

The mechanism of the eye is such, that the presence of inflammation or congestion in them is exceedingly mischievous. To perform its office easily it has to be kept well lubricated. To this end the lining of the socket is not only provided with sebaceous glands, but over each eye, in the upper part of the cavity it occupies, there is a reservoir called the lachrymal gland, which pours out upon the ball a fluid slightly mucous and saline; and, to make the arrangement complete, at the inner corner of each eye there is a canal, the orifice of which is large enough to admit a bristle, and which in health con-

veys off any excess of this fluid, as well as that which has become too old to be made useful. These canals connect with the nasal duct. To prevent the lachrymal fluid or tears from running down over the face of the eye when open, there are a number of minute glands along under the edges of the lids which secrete an oily substance. This, with the imperceptible pressure of the edges of the lids upon the eyes, holds back the watery secretions, which pass down around the inner edges (as if eave-troughs confined them) to the tear ducts before described. The oil glands at the edges of the lids also prevent the latter from becoming a-glued or stuck together during sleep. Without them it would be difficult to get the eyes open in the morning. Even the eyelashes at their roots have the oily secretions common to all hair, which lubricate them, and prevent them from becoming adhesive when moistened with the watery secretions of the lachrymal glands. In addition to all this ingenious and wonderful mechanism, the veins of the eyes in health are too small to admit the red corpuscles of the blood, and it is by this arrangement that the whites of the eyes in health preserve their clearness, and the lenses are enriched by colorless blood, for otherwise the vision would be obstructed by specks, spots, patches, etc., even in health.

Fig. 112.



OPHTHALMY.

With the foregoing brief description of some of the mechanical arrangements of the eyes, it may be readily seen how inflammation or any undue pressure of blood upon the organs of vision and their immediate surroundings, will interfere with the proper performance of their functions. When inflamed, red, feverish corpuscles enter the veins; they redden the sclerotic or white of the eye; they distend the veins of the eyelids and linings of the sockets; they vitiate the secretions of the lachrymal glands, or reservoirs over the eyes, making them scalding in their properties; they dry up or make gluey the oily secretions of the glands along the edges of the eyelids, and also those which keep the eyelashes from becoming matted or stuck together. When all these derangements

take place a person has what are commonly called sore eyes, and technically, ophthalmy. When the difficulty survives the immediate cause which precipitated it, whether that immediate cause be cold or catarrh, or something getting into the eye, or local infection, or contusion, or, if it comes on gradually without any known immediate cause, it may be called chronic sore eyes, or chronic ophthalmy.

Sore eyes induced by a cold may simply present an inflamed and swollen appearance, with a profusion of water, and sensitiveness to light; induced by catarrh, similar symptoms with an exudation of unwholesome mucus; induced by something entering the eye, soreness, and sometimes great pain attended with an excessive flow of the lachrymal fluid; induced by contusion, similar symptoms to those just described; but when induced by infection such as leucorrhœal or gonorrhœal or syphilitic matter, or perpetuated by scrofulous or syphilitic impurities in the blood, the discharges are purulent, with all the foregoing symptoms combined; and the poisonous matter which is exuded, if brought in contact with the lids of healthy eyes, proves contagious. It is believed by some people that simply looking into such eyes will affect healthy ones; but I am confident that all such supposed cases came some way in contact with at least a particle of the diseased virus. In a family, for instance, where chronic sore eyes attack one of the children, and then the difficulty spreads to several others; it will probably be found on close investigation that they have played with each others' toys, or wiped on the same towel, in either of which ways a little grain of the diseased matter may have been communicated to the eyes of the healthy child. Women having bad leucorrhœa, and men affected with gonorrhœa; or others of either sex having syphilitic ulcers or sores, should always be extremely cautious not to touch the fingers to the eyes after they have been in contact with the affected parts, and should carefully avoid wiping the face with the same towel used for wiping the hands.

In the treatment of chronic sore eyes the blood must receive the main attention. No case will become chronic unless the blood was previously impure, or became so by the infectious matter with which the eyes were inoculated. I have cured many cases without any local treatment whatever; but when the latter is resorted to, it should be of a mild healing nature, and always accompanied with thorough medication for the blood. Those having an affection of this

kind, wishing to consult the author, should answer the questions in the closing Chapter of Part II.

Amaurosis.

This consists of a complete loss of sight, without any perceptible change in the appearance of the eye. It most commonly results from paralysis of the optic nerve. This paralysis may proceed from a want of nervous vitality in the system; or from the location about the optic nerve of blood-impurities which intercept the nervous circulation therein. When it proceeds from nervous derangements, electricity or animal magnetism carefully applied to the eyes, together with tonic remedies, will restore all curable cases; but when scrofulous or syphilitic blood sends its impurities to the optic nerve so as to interfere with the performance of its functions, the treatment must be mainly directed to the eradication of them. I have cured cases of this kind without any local treatment whatever.

The approach of amaurosis is usually foreshadowed by the appearance of specks, streaks, sparks of fire, clouds, and mists before the sight, with more or less dullness of vision, and in some cases acute pain in the ball of the eye, and in others in the optic nerve, running back until lost in an undefinable ache. When these symptoms make their appearance, no time should be lost to arrest the progress of the disease, for incipient amaurosis may be said to already exist. Persons having these symptoms are apt to resort to spectacles of various kinds, and to advertised eye-washes, instead of presenting their cases to a skillful physician. All who do this waste valuable time, and they are also liable to injure themselves by experiments.

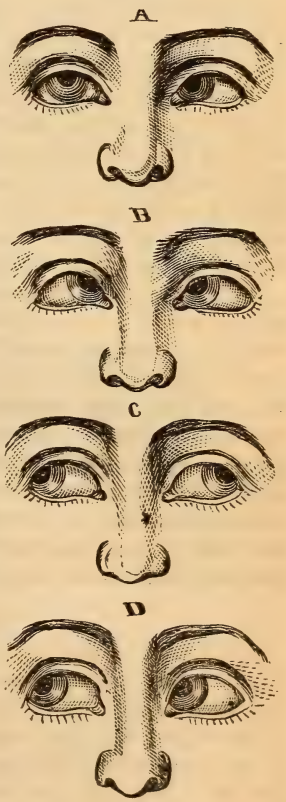
Cross-Eyes.

An affection of this kind is technically called strabismus, and by many "squint." People thus affected not only look very queerly, but it is generally difficult for an observer to tell exactly what particular object they are looking at. Cross-eyed schoolmasters are always a great bother to the boys, who naturally perpetrate their mischief when the eyes of the teacher are apparently not on them; but when the tutor has optics like any of those given in the annexed illustration, and especially if like *c*, the boys are entirely adrift, and find it unsafe to look off their books, or throw paper bullets at their fellow-students. There can be no doubt that all con-

genital formations of this kind were originally intended for schoolmasters and schoolma'ams, but the fall of man has so mixed up things, that cross-eyes seem to present themselves here and there without a particle of reference to avocation, and school-boys are not often enough afflicted with teachers having them.

In the annexed illustration, *a* represents a single convergent squint; *b*, a double convergent squint; *c*, a double divergent squint; and *d* a convergent and divergent squint. The displacement of the eye in any one of the cases illustrated, if congenital, or in other words, when the person affected was born so, results from the natural contraction of one set of muscles, and the natural extension or relaxation of those on the opposite side; but this same position of the eyes may be produced by disease affecting the muscles; or it may be acquired by practising it for sport; or a weakness of one set of muscles and a contraction of the other may gradually take place without any visible cause. Strabismus generally must be treated both medically and surgically, and in my surgical department all operations of this kind are performed in a few seconds, by an experienced operator, who does the work so expertly as to give the patient scarcely a particle of pain. When there is cerebral affection or weakness of the eyes, medication alone will sometimes overcome the difficulty, but if not, it should either precede or immediately follow an operation.

Fig. 113.



Other Diseases of the Eye

Will not be presented here, as more space than was originally apportioned to this division of the chapter is already occupied. I

will, therefore, call the reader's attention to diseases of the ear, after remarking that all affected with any diseases of the eyes, are at liberty to consult the author in relation thereto. In all letters of consultation, answers to the questions on page 583 should be given.

Defective Hearing.

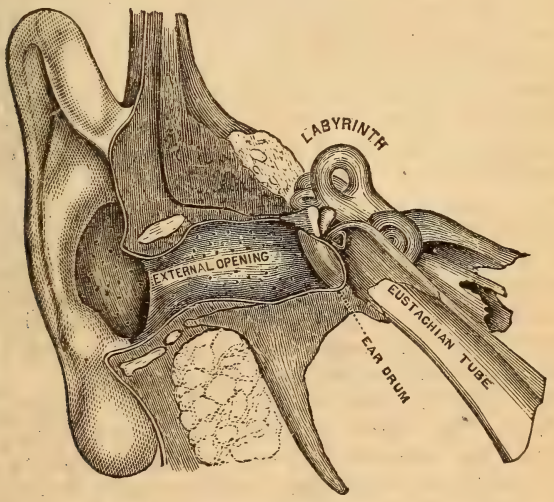
If the non-professional reader could follow me through all the circuitous paths of the ear without becoming befogged with the technical names anatomists have bestowed upon the various organs therein; if the common mind could be made conversant with the complex physical machinery of the organs of hearing; and then, if we could all of us comprehend the mysterious, ever-hidden connection existing between the physical organs of sense and the conscious principle, we might cease to wonder at, but never to admire, the peculiar mechanism by which all of us, gifted with the sense of hearing, are made conscious of so much that is passing in the material world through that remarkable something we familiarly denominate *sound.*

Your friend speaks to you. How are you made aware of the fact, and of the impression he wishes to convey to your mind? He expels from his lungs currents of air, shaped by the organs of the throat and modified and chopped off here and there by the motions of the tongue and lips, so that the air moves toward you in what may be called articulate waves. These fall upon the external ear, a perfect acoustic instrument, which is so modeled as to conduct them into the orifice, where they soon come in contact with the ear-drum, technically called the tympanum. This instantly vibrates in perfect accord with the motions of the articulate waves, and the vibrations of this organ in turn set in motion other waves in the air confined in the cavity beyond, when motion is communicated to reeds of delicate bones—the smallest bones in the body—and to fibres of muscle, which vibrate like the reeds of an organ when acted upon by currents of air, or the strings of a violin when agitated by the finger or bow. Thus further modified and intensified, these waves move onward through irregular cavities, circuitous canals, convoluted tubes, and delicate membranes, all of the most wonderful complexity, until reaching the labyrinth, or parlor of the ear, where there are cushions of fluids upon which they fall and set in motion multitudinous little granules of calcareous matter, whose agitation frictionizes

the sensitive, minute branches of the auditory nerve, which penetrate the sacs confining the granules. This influence conveys to the mind what is commonly called sound; but just how this is affected no human anatomist or physiologist is likely ever to be able to determine.

Considering the complexity of all this hearing machinery, and the delicacy of the various parts composing it, exceeding in some respects the wonderful mechanism of the eye, it is not at all strange that many are affected with partial and some with entire deafness.

Fig. 114.



THE HUMAN EAR.

Not a single tube can be closed, not a bone or fibre destroyed, not a particle of change in quantity or quality of the fluids of the sacs, or those moistening or bathing the membrane lining the canals or cavities, occur, without affecting the accuracy of the impressions conveyed to the mind through the mechanism of the ear.

Let us briefly look into the most common causes of defective hearing. We will commence as soon as we penetrate the orifice. In what is called the external opening, between the outer orifice and

the ear-drum, there are yellowish colored glands which pour out upon the lining of this canal a fatty, albuminous, yellow substance, possessing some of the properties of bile, which we call the ear-wax. The true office of this secretion, is probably to exclude insects from the ear, as it is disagreeably bitter and adhesive. Flies, mosquitoes, fleas, and the minute inhabitants of the tenement bed-chamber could make as little headway through this secretion as they could through molasses, while its flavor to their epicurean teeth would be far less palatable. So long as this secretion is not deficient, excessive, or vitiated, this portion of the ear generally performs its function properly. But if it dries up, insects may nestle there, irritate the canal, and obstruct the vibrations of the air; if it becomes excessive, or gluey and dense, then the canal is obstructed, and in some cases completely filled up. A deficiency, excess, or vitiation of this secretion, called ear-wax, may therefore render the hearing defective.

The external opening of the ear terminates with an organ called the tympanum or ear-drum, a membrane nearly circular in form, and fastened in a bony ring. Its external surface forms a conical concavity, highly polished, and in the living subject the membrane is nearly transparent. Naturally it is without orifice, but in some persons, by disease or accident, it may have become slightly perforated without materially affecting the hearing. If, however, this organ be greatly perforated, or nearly or quite obliterated; or if it be thickened or indurated; or if the muscles controlling it be weakened or destroyed, hearing may be defective or lost altogether.

The inner side of the ear-drum is what is called the cavity of the tympanum. This must be supplied with air to make the hearing complete. The air reaches it by what is called the Eustachian tube, which opens like a trumpet, large enough to insert the little finger, in the throat, and extends along upward and backward, for nearly two inches, when it opens into this cavity; but the lining of the latter secretes a mucus, with which to moisten its walls, and in disease this secretion may be thick and excessive, in which case it fills up the Eustachian tube, and thereby excludes air from this cavity, and in many cases fills the cavity itself. Or, if the mastoid cells or sinuses, which have an opening in the cavity of the tympanum, nearly opposite the Eustachian tube, be the seat of irritation, the secretions of these may deluge the cavity or clog the tube. In some cases, these walls, cavities, and tubes are affected with catarrh, and

become congested with catarrhal matter. Whenever or however they are obstructed, the person so affected cannot hear distinctly, if at all.

It sometimes happens that the labyrinth, with all its delicate appurtenances, becomes the seat of disease, obstructing communication with the tympanum, or causing such a change in the fluids of the sacs containing the calcareous granules, that the auditory nerve fails to receive any impression from the vibrations going on in the tympanum, or its vicinity. In either case, partial or entire deafness must ensue.

Ulcerations sometimes take place in the delicate organs of the ear. It is terrible to have such visitations here, for they are liable to destroy the walls of the tubes, canals, and cavities; to eat away entirely the ear-drum, and to break up and destroy the delicate bones and muscles, forming the reeds and strings, and to expel them through the external opening in the form of offensive matter. Entire deafness sometimes results from these ulcerations.

No form of disease, however, can be more complete than that caused by paralysis of the auditory nerve. All the other organs of the ear may be in complete order, and mechanically vibrate to every atmospheric impulse. The articulate waves may move along regularly through all the natural cavities and tubes, and enter the labyrinth with the greatest precision and order; they may set in motion all those peculiar little granules which play upon the termini of the auditory nerve, but if the latter be paralyzed, no intelligence whatever is conveyed to the brain. This line of telegraph is practically down, and although the brain may be in communication with the external world by telegraphic connection with the eyes and other organs of sense, no message whatever is received via eardom. The approach of paralysis of the auditory nerve is usually heralded by noises in the head, ringing and roaring in the ears, and, in some cases, by acute pain. There are constantly motions taking place in the atmosphere of so slight a nature that the healthy auditory nerve is not impressed by them. If you please to call them sounds, then there are sounds of which the normal auditory nerve takes no notice. But when that nerve becomes irritated or inflamed—as sensitive as a tender tooth—it feels every impulse of the air, however slight, and considering the forms of the canals through which these impulses pass, the sensation conveyed through the irritated

nerve to the brain, is more commonly that of roaring. This is undoubtedly mainly due to what is called the cochlea, which is a conical tube so convoluted that its form resembles the shell of the snail, having, however, two cavities, one of which begins at the vestibule and the other at the tympanum, and continues through its whole extent. Nearly everybody has undoubtedly noticed what a roaring noise a large shell produces when held near the ear. When the auditory nerve has only the sensitiveness natural to it in health, the shell needs to be nearly or quite as large as a hen's egg; but when it has the acute sensibility which irritation or inflammation imparts, even the action of the air in this little convoluted tube, having the form of a shell, conveys to the nerve and thence to the brain a sound similar to that experienced when a large shell is held against the ear. This is a new theory, of my own, but I think it will commend itself to physiologists. All the peculiar noises experienced in the ears of persons having affections therein, like the singing of a tea-kettle, ringing and ticking, indicate an undue sensibility of the auditory nerve, which is made conscious of motions of air in the tubes, canals, and cavities of the ear, of which, in health, it is not cognizant. When these noises continue for a long time, a reaction is liable to follow, and the auditory nerve changes from this acute sensibility to partial or entire insensibility, and at this juncture of the disease, defective hearing or complete deafness ensues.

Complete deafness is usually incurable. If, however, a person can hear a little; if by the aid of ear-trumpet the human voice can be heard and its language understood, it is generally prophetic of the possibility of recovery, if the right course be pursued by the physician having the case in charge. Every one affected with partial deafness should intrust his case to a skillful physician who is thoroughly acquainted with the anatomy of the ear, and who has had experience in the treatment of its diseases. No practitioner deficient in these qualifications should attempt to treat partial deafness, and especially should the victim of this affection refrain from any attempt to devise or apply local remedies unless guided by the advice of a physician.

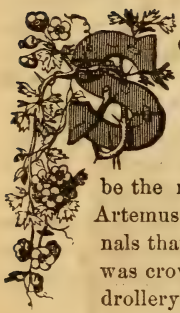
Persons observing the approach of difficult hearing may many times prevent the development of deafness by taking remedies suitable for purifying and strengthening the blood, because all the secretions of the ear are derived from the circulation, and will be

healthy or unhealthy according to the pure or impure condition of the vascular fluids; but when the affection seems to be steadily coming on in spite of gentle constitutional treatment, obtain without delay the advice of a medical man in whom you have confidence.

Paralysis of the auditory nerve has in some instances been cured by the judicious application of electricity. Deafness resulting from the obstinate obstruction of the Eustachian tube has been relieved by admitting air into the cavity of the tympanum by slightly perforating the ear-drum. Defective hearing caused by entire destruction of the ear-drum has in some cases been greatly benefited by wearing a false tympanum (see page 911). Catarrhal people affected with deafness have many times entirely recovered from the latter by the cure of the former. Scrofulous people who have nearly lost all sense of hearing may generally have that sense restored by the eradication of the scrofulous impurity if ulcerations have not impaired the structure of the ear. All having any defect in the organs of hearing, wishing to consult the author, should answer the questions on page 583. The entire chapter in which the questions to invalids appear will be found to be suggestive.

CHAPTER VI.

DISEASES OF THE HEART.

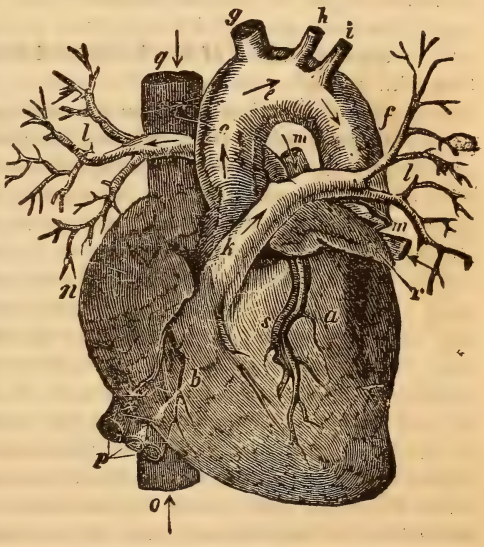


OME nervous reader who may imagine that he has a heart disease, will undoubtedly thumb these leaves for the symptoms which indicate the existence of such affections; but he will be disappointed. I am not going to give them. This will be the most incomplete chapter in the book. The late Artemus Ward once gave out notice in the New York journals that he would lecture on the Russian Bear. The hall was crowded, and after making the audience roar with his drollery for an hour or more, perpetrating jokes no way relevant to the subject, he concluded by saying he should not have time to touch upon the topic proposed, but that tickets would be issued at the door to those who chose to hear him expatiate upon it, which tickets would entitle the holder to attend his next lecture to be given in San Francisco! The author will not attempt to mitigate the disappointment of the nervous reader, by the pleasantry characteristic of Artemus, but will frankly avow the reason for avoiding any thing like a serious essay upon the diseases named in the heading. It is this: all nervous or dyspeptic persons who hear or read a description of the symptoms attending affections of the heart, invariably imagine that they are victims to them. It is, therefore, quite as well to confine information of this kind to the pages of medical works written expressly for the profession, inasmuch as nervous or dyspeptic difficulties often produce symptoms so closely resembling those resulting from actual diseases of the heart, that a critical medical examination is necessary to determine the question with certainty. No one knowing fully the symptoms, can rely upon his own judgment in the matter, and to save unnecessary apprehension in the minds of those who have a disease of the imagination rather than of the heart, it is well to avoid every thing in a work intended for the

people, that can by any possibility aggravate the whimsical tendency of a distempered brain.

Dyspeptic and nervous persons are not the only ones who are apt to imagine that they are victims of heart disease. There is a membrane or sac which envelops the heart, called the pericardium. This is often the seat of inflammation, and when it is, pains in that region and palpitation of the heart are generally experienced, together with all the symptoms which are supposed to characterize a disease of the heart itself.

Fig. 115.



THE HEART.

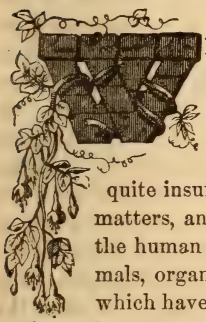
a, *b*, the left and right ventricles; *c*, *e*, *f*, the aorta; *g*, *h*, *i*, the innominata, left carotid, and left subclavian; *k*, the pulmonary artery which is given off from the right ventricle, and conveys the blood to the lungs; *l*, *l*, branches of the pulmonary artery distributed to the right and left lungs; *m*, *m*, the pulmonary veins, which bring the oxygenated blood from the lungs to the left auricle; *n*, the right auricle; *o*, *c*, the ascending and descending venæ cavæ, which return the blood from the general system to the right auricle; *p*, veins which convey the blood from the liver, bowels, and spleen; *s*, the coronary artery which carries blood into the substance of the heart.

Palpitation of the heart may be induced by various causes. There may be too great an expenditure of nervous force upon this organ, and when this is the case, it is generally found that it is at the expense of other organs. When the liver becomes torpid, it will often be discovered that the nervous stimuli belonging to that organ, have in some way been diverted to the heart, resulting, of course, in the inactivity of the former, and the excessive activity of the latter. Persons subject to cold extremities often have all the nervous forces and vascular fluids which should be occupied

in keeping the feet and limbs warm, acting in and about the heart, causing the latter to jump and beat unnaturally, violently, and injuriously. There are affections of the procreative organs, which are attended with such nervous derangements as to give both to them and the heart an undue supply of nervous stimuli. Persons of both sexes are subject to them, and when they exist all of the other organs of the body are robbed to supply this abnormal diversion, which sets the amative organs of the brain on fire, and makes the heart leap with morbid excitement. The stomach may become so distended with wind, when digestion is sluggish, as to encroach upon the cavity occupied by the heart, and interfere with its action to such a degree as to cause palpitation or labored pulsation. Excess of flesh, in some cases renders the space naturally allotted to the heart, too limited, and the same symptoms are then experienced as when the stomach invades it. Excess or insufficiency of blood, excessive mental emotions, whether of joy or sorrow, and too severe and protracted physical exercise, may induce an unnatural action of the heart. Considering, therefore, how greatly the action of the heart is influenced by a variety of causes not at all implicated in any disease of the organ itself, it would be difficult to make this chapter physiologically and pathologically exact, without arousing in the mind of the unprofessional reader some apprehensions in regard to the condition of the heart, if he be at all imaginative. The office of the heart need not be explained here, as it has already been defined in the first chapter of this book, on page 35, and I will consequently bring this chapter to a close, simply advising those who suppose they have some affection of this important organ, to present their cases to an honorable physician, as they will generally find to their happy surprise, that the symptoms arise from other, less dangerous, causes. Answers to the questions to invalids on page 583, will enable the author to diagnose a case correctly. Any person is at liberty to present his symptoms by answering these questions.

CHAPTER VII.

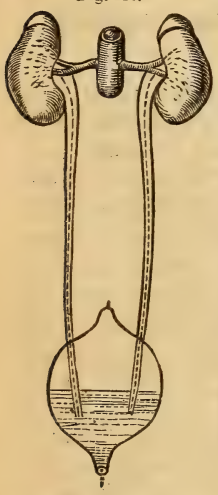
CHRONIC AFFECTIONS OF THE URINARY ORGANS.



WHEN the skin and lungs are in a healthy condition a large amount of the waste fluids of the system passes off in the form of sensible or insensible perspiration and in vapors exhaled, but the excretory pores and lungs would be quite insufficient, unaided, to dispose of the soluble effete matters, and consequently the divine Artificer created in the human body and in the bodies of all vertebrated animals, organs, called the kidneys, together with other organs which have been named, by anatomists, the ureters, bladder, and urethra, to act subordinately to them. The kidneys in the human system are brownish red, bean-shaped glands, located on either side of the spine in what is denominated the lumbar region. They are largely made up of tubes and cells and of membrane of so thin texture, that as the blood passes through the kidneys, the watery portions pass through the membrane as readily as water passes through muslin, and it then trickles down through tubes to little reservoirs in the kidneys, and from thence through the little canals called the ureters to the bladder, which is the great receiving reservoir of the urine. In health the bladder retains the water till it becomes full, or until it is convenient to dispose of it. In both sexes the bladder is located in the lower part of the bowels. In men it is bounded at the back by the seminal vesicles and rectum, and in women by the vagina. In front it lies just back of the lower abdominal walls. The bladder empties itself through the urethra, which in the male extends along the under part of the penis to the orifice at the end, and this same urethra is the conducting pipe of the seminal fluids when they pass off. In the female it performs only the office of carrying off the urine; it is very short and terminates just above the vaginal orifice.

In my practice I have a large percentage of cases suffering with diseases of a chronic nature, located in some part of the urinary apparatus. So closely connected, anatomically, are the urinary with the procreative organs, and so greatly are the latter abused, it is not surprising that the former are frequently the seat of painful and dangerous affections. In both sexes the amative passions are prematurely developed and stimulated. These, at an early age, too often lead boys and girls into private vices, and the mature and married into sexual excesses and pernicious modes for the prevention of conception, all of which physical violations are well calculated to disturb the nervous harmony of the parts, impoverish and vitiate the blood, and to lay the foundation for serious derangements of those organs which secrete and discharge the urine. The most common of these diseases are:—chronic inflammation in the kidneys; weakness in the kidneys; consumption of the kidneys; grub in the kidneys; chronic inflammation in the bladder; paralysis of the bladder; gravel; chronic gonorrhœa; stricture of the urethra; etc.

Fig. 116.



THE HUMAN WATER-WORKS.

The kidneys at the top are connected by canals called the ureters leading to the bladder. The neck of the bladder connects with the urethra, which is not given in the illustration, as the latter is without sex and stands to represent the urinary organs of both sexes.

The office of the kidneys is to secrete the useless alkaline and calcareous particles and the soluble waste matters from the blood. The bladder, as before remarked, is the reservoir for these, and the urethra is the waste-pipe for carrying them off. Everybody living in houses supplied with aqueduct water knows how much trouble it gives the kitchen-maid when something, by her own carelessness, obstructs the waste-pipe. Now old dame Nature has double the trouble of any "Bridget" in keeping human water-pipes in order, not from any dereliction of duty on her part, but from the carelessness and imprudences of man and woman kind generally. Mechanical water-pipes could never endure the abuses which are almost daily inflicted by men, women, and children, on those organs made in part, by the economy of nature, for the pur-

pose of carrying off the waste fluids which nature wishes to dispose of.

Albeit, it is useless to moralize, even in this quaint way. Generation after generation passes off the stage of life, one profiting little by the experience of its predecessor. Individuals suffering with such troubles only intrust the secret to their physician, and the mass of humanity goes recklessly on, vainly thinking that this first, second, or third abuse of the delicate urino-genital structure will not be followed with a penalty, until a large proportion of all have at last tasted the bitter cup, while some drink it to the dregs. It is, therefore, waste of words for the medical writer to do more than point out the dangerous shoals and breakers, and then turn his attention to those already wrecked, and who are too often catching at straws to save themselves. I will therefore pass to the consideration of some of the diseases I have adverted to.

Diseases of the Kidneys.

Chronic Inflammation of the Kidneys is characterized by heat and pain over the loins, and more or less dull pain in the lower part of the back, often extending down into the bladder and groins. The urine has usually a bloody or high-colored appearance and a variableness in quantity. If actual pain does not exist in the region of the kidneys, there is a tendency to soreness on pressure. These symptoms are more or less modified or changed when other complications exist, and it is usually the case that this disease is accompanied with other disturbances.

Inflammation of the kidneys is generally induced by vascular derangements, but when caused by any contusion of the parts, the danger and obstinacy of the difficulty is enhanced. The profession generally find mechanical injuries troublesome complaints to manage. In fact, in difficult cases of this nature the usual remedies for inflammation seem to be unavailing. A farmer in Saratoga County, who, in cutting down a tree, had the misfortune to be prostrated by its fall, received an injury in the kidneys which came near costing him his life. Before he consulted me he had examined all the "pathies," and called on all the doctors he knew. Having been urged to see me, he presented himself at my office a pale, emaciated individual, suffering agonies with his back, and having every appearance of being in consumption. Besides his weak and painful kidneys, he had a

bad cough; and what is still worse, no faith that anybody could cure him. There were, indeed, alarming indications in his symptoms, but having had good success in similar cases, I gave him my opinion, and advised him to try my electrical system of practice. He consented, with apparent despondency and reluctance, and I prepared for him a two months' course of electrical medication. This had a beneficial effect, and a second course was ordered. Twelve months from the time I first saw him, he gave me an unexpected visit, so much changed in appearance that I did not recognize him. The pale, despondent invalid of a year ago, had become a stout, stalwart-looking man, and his expressions of gratitude for what I had done for him, were of the most flattering character. This case and others of a similar nature, have convinced me that my original system of medication reaches and remedies the effects of mechanical injuries (when all other medicines have failed) as well as those arising from constitutional derangements, for the case I have cited was certainly hopelessly incurable under any ordinary system of medication, however skillful the practitioner.

Unless produced by contusion, as before remarked, chronic inflammation in the kidneys is generally produced by vascular derangements, and these derangements are most commonly the results of stimulating articles of food and drink, which inflame and vitiate the blood. The treatment necessary, therefore, is that which will restore the purity and tone of the vascular fluids.

Chronic Weakness in the Kidneys most generally occurs in persons possessing little nervous vitality, or a derangement in its circulation. It is attended with weakness in the lower part of the back, relaxed muscular system, and not unfrequently symptoms of approaching dropsy. In this difficulty, electricity, in some form, is necessary to exalt or regulate the nervous or electrical action in the organs. Medicines having no electrical property with which to impart nervous vitality, can be of little service. Persons most liable to this affection, are those who, in youth, have practiced masturbation, or, in adult age, sexual excess, and what is commonly termed "withdrawing."

Consumption of the Kidneys is often met with in a large practice. It is attended with scanty urine loaded with albumen, and often with dropsy or swelling of the bowels and limbs, and sometimes with cough. Bright's disease (so-called from Dr. Bright, an English

physician, who first described it), may be properly placed under this head, and so indeed may ulcerous, tubercular, and all affections tending to destroy either the cortical, tubulous, or papillous substance of the kidneys.

There can be no question that consumption of these organs results from both nervous and vascular derangements; at least I treat the difficulty as if so induced, and with the most satisfactory results. Lack of proper nervous stimuli in the parts deadens them, or renders them inactive and prepares them for the intrusion of blood impurities; then commence those decomposing or ulcerating processes, which, unchecked, are so apt to lead to an early fatal termination. Hence the necessity of directing the treatment to the invigoration and purification of the nervous and vascular systems.

Fig. 117.

A SECTION OF ONE OF THE KIDNEYS.

1, Supra-renal capsule; 2, vascular portion; 3, 3, tubular portion; 4, 4, two of the papillæ; 5, 5, 5, the three infundibula; 6, pelvis of the kidney; 7, one of the ureters.

Bright's disease of the kidneys is commonly regarded as incurable, and invalids whose cases have been pronounced Bright's disease are usually discouraged if they accept the diagnosis as correct. While it must be considered dangerous, as a disease in these organs, analogous to tubercular or ulcerous affections of the lungs, I think I have reason to hold out hope that it may in many aggravated cases be permanently cured. While writing this chapter I am agreeably surprised to receive confirmation of this very statement. The following testimonial has this moment been handed me.

"E. B. Foote, M. D.—Dear Sir:—It has long been in my heart to write you some slight acknowledgment of what you have done for me and mine. Words cannot express my gratitude, and the overwhelming sense of this has helped to keep me silent so long. I came to you on the 16th of March, 1863, to ask 'can you do any thing for my sister?' She had Bright's disease of the kidneys of two or three years' standing; her physician had just declared she could not live a month. You did not say, 'I can cure her,' but 'I think I can do as much for her as any one could.' I believed this, previous knowl-

edge of your practice having given me confidence in you. So I hastened to my home in Massachusetts strengthened by your words of sympathy and kindness, and bearing remedies which proved the elixir of life to the dear one. The treatment began on the 18th of March. By April the first there were indications of positive gain, though when I wrote you of them you begged me not to be too sanguine. My sister's diary states that on the 29th of the same month she dined and took tea with the family. May 1st she went out of doors for the first time since the previous October. After this her gain was constant and reasonably rapid, until she was in better health than for many years before her illness. Since her recovery she has borne an amount of physical exertion and mental anxiety almost beyond belief, and though at times feeling their effects somewhat as any thing mortal must have done, she has not broken down. My sister has never seen you, but she feels that, under God, you were the means of bringing her up from the very borders of the grave. She never speaks of you but with tones and words and looks expressive of the deepest gratitude. May the good Father prosper you greatly in the humane work you are doing, and help you to send into many homes such gladness as that with which you have blessed ours."

I remember this case very well, and also the morning that this devoted sister called upon me at my office with tears in her eyes, and a letter in her hand, giving the painful decision of the family physician. The case was a bad one, and I must confess I was not very hopeful at the outset. Disease had proceeded so far that suppurating abscess had formed in the kidneys. Even now, her sister informs me, she feels a sensation as if there was a cavity in one of them, which is very probably the case, as what had been destroyed could not again be restored. Many months had passed since I had heard from this patient directly or indirectly, until this missive was handed me today.

Grub in the Kidneys is a disease which is invited by the same causes which produce grub in the liver (see page 376). Nature sometimes attempts to get rid of the vermin which intrude themselves into the system, by sending them off with the urinary secretions; but if the kidneys are not nourished by pure blood, and stimulated with a good supply of nervous or electrical force, they are not in a condition to resist the lodgment of the minute infusoriæ, which make

themselves as much at home as worms in an apple. The most usual symptoms of grub in the kidneys are, grumbling pain in the lower part of the back, offensive urine, mixed with more or less mucus, dropsical affections of the abdomen, legs, or feet, and, in some cases, accompanied with a discharge of some of the vermin with the urine. There is no treatment like electrical applications from the hands of a good operator, to destroy grub in the kidneys. A minute stroke of lightning, such as is hardly felt by the patient, is as certain death to those little creatures, as a thunderbolt is to the larger types of animals; electrical medication (see page 299) is a good substitute, but electrical applications to destroy the infusorial life, followed with nourishing medicines to enrich the blood, can hardly fail in the most desperate cases.

Affections of the Ureters.

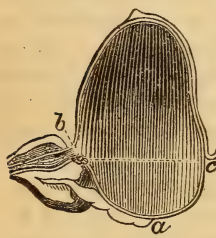
These two canals, which conduct the urine from the kidneys to the bladder, are lined with mucous membrane, and are liable to all the affections to which the mucous membrane in other parts of the body is subject. When inflammation exists in the kidneys, it is apt to extend down through the ureters, and sometimes to the bladder, so as to involve that organ. The ureters may also be the seat of catarrh, chronic irritation, stricture, and in some cases they become blockaded with calcareous accretions. In all affections of the ureters, attended with inflammation, more or less pain is felt in an indefinable position between the region of the kidneys and that of the bladder, but when all the urinary organs are involved in inflammation, the aches and pains are of such a nature as to convey to the mind of the invalid a sensation as if the urethra, bladder, ureters, and kidneys were all one diseased organ, extending from the lumbar region to the mouth of the urethra; and then, again, when the surrounding organs are affected by the pervading inflammation, the patient correctly remarks: "I am diseased in every part of me below the waist." Every movement, and especially stooping and walking, and every thing producing a jarring motion of the abdomen, makes the patient feel as if the abdominal cavity was full of painfully sensitive bodies, jostled together in wretched confusion.

Affections of the Bladder.

Chronic Inflammation of the Bladder is a disease resulting from vascular derangements. It is usually attended with more or

less ulceration, and to learn how painful it is, one can form something of an idea by dipping a sore finger in urine. The secretions of the kidneys are of an acid nature, and are consequently as unfit to be deposited in an inflamed bladder, as vinegar is unsuited to come in contact with a sore mouth. When, then, inflammation exists, there is a smarting heat, pain or soreness in the lower part of the bowels, just above the pubes, where the bladder is located. Sometimes the disease is attended with swelling in this region, and extreme tenderness to the touch. When the inflammation or ulceration exists at the neck of the bladder, no apparent discomfort is experienced until sufficient urine accumulates to rise to the level of the neck, when pain is at once felt with an irresistible desire to void urine. Contrary to the idea usually conveyed by anatomical illustrations of the bladder, the lower part drops a little below the line parallel with the outlet. We will suppose the annexed cut (fig. 118), to represent the bladder, with an ulcer or inflamed spot on the neck. The lower or depressed portion of the bladder is indicated by *a*; the ulcer, or inflamed part, by *b*. Now, so long as the urine is below the line indicated by the dots *c*, little if any inconvenience is experienced. But just so soon as it reaches *b*, smarting pain immediately ensues, and sometimes the acridness of the fluid will produce such a sudden swelling of the part, that the water passage will become entirely closed, and the painful desire to urinate will only be aggravated by utter inability to do so. If this be not the case, and the water passes off without obstruction, the desire occurs as often as the urine reaches the point indicated by *b*. Little is voided at each time, but micturition is frequent and painful.

Fig. 118.



THE BLADDER.

When the neck of the bladder swells so as to obstruct the passage of the urine, the only mode of relief is the introduction of a hollow tube, called the catheter, through which the urine can escape, or a gum bougie, lubricated with a soothing ointment to allay the irritability. The latter process is preferable, when it will have the desired effect.

I have had several difficult cases of this kind, one of which particularly presents itself to my mind at this moment. A young woman

placed herself under my care for the cure of several complications, one of which was chronic inflammation in the neck of the bladder, attended at times with ulceration. Her suffering for months had been indescribable. She had been compelled to allow the urine to collect for three or four days, during the last forty-eight hours of which, on each occasion, she suffered more than the pangs of death. When she could endure her agonies no longer, and nature seemed indisposed to come to her rescue, the catheter had been employed by her attending physicians. Each of these operations had been attended with the discharge of nearly a gallon of urine. She had tried several medical celebrities in vain for even temporary relief. In undertaking her case, I avoided the catheter and used the bougie, lubricated with a soothing ointment, in the early stages of the treatment, for drawing off the water, while I employed both electrical and medical agencies to remove the real cause of her trouble. It was but a little while before an electrical application would cause the urine to flow off freely, and as soon as the constitutional treatment had time to do part of its work, electrical applications were also abandoned, for nature promptly availed itself of the improvement to resume the performance of this function naturally. Perseverance in the use of electrical medication completed a radical cure.

Paralysis of the Bladder is a disease which may render micturition difficult. The muscular fibres of the organ run in every direction, and when they are contracted, the cavity is entirely obliterated. The healthful expulsion of the urine depends upon the pressure of these muscles, just as the discharge of the excrements depends on the compression of the abdominal muscles and the intestines. When, then, the muscles of the bladder are paralyzed, a complete and satisfactory discharge of the urine cannot take place.

At the neck of the bladder there is a set of muscles, called the sphincter, to close it, and retain the urine. If these, too, are paralyzed, then there will be a continual drizzling of urine, and incapacity on the part of the invalid to control the discharge. In children these muscles are sometimes weak, without being paralyzed, and the result is, that when asleep, and consequently not able to guard against it, a discharge of the urine takes place involuntarily. Accidents of this kind occasionally occur in adult age. In all these difficulties electricity, in some form, must be employed. Nothing,

as yet, has been discovered capable of so energizing the muscular system, as this element. It is the only remedy for paralysis in any part of the system. If skillful applications of electricity directly to the parts cannot be obtained, then electrical medication should be adopted as a substitute.

Gravel is a name given to a disease which produces calcareous, earthy, or sandy deposits in the bladder. It is caused by an excess of calcareous or limey matter in the blood, and an insufficient supply of acid in the urine to hold these particles in solution. The disease is most common in limestone regions, or where the water used for drinking purposes is hard. Scrofulous people are liable to this disease in any location, but manifestly more so where the water is hard or limey. Coffee is advised by many as a preventive against this painful disease, but, of course, this remedy is only admissible for those who are not rendered bilious by its use. "Dr. Mosley observes, in his 'Treatise on Coffee,' that the great use of the article in France is supposed to have abated the prevalence of the gravel. In the French colonies, where coffee is more used than in the English, as well as in Turkey, where it is the principal beverage, not only the gravel but the gout is scarcely known. Dr. Faur relates, as an extraordinary instance of the effect of coffee in gout, the case of Mr. Deverau, who was attacked with gout at the age of twenty-five, and had it severely until he was upward of fifty, with chalky stones in the joints of his hands and feet; but for four years preceding the time when the account of his case had been given to Dr. Faur to lay before the public, he had, by advice, used coffee, and had had no return of the gout afterward." Inasmuch as gout and chalky stones in the joints are difficulties known only to persons of a scrofulous diathesis, it is apparent that coffee is a remedy only in so far as it affects the scrofula favorably. Coffee is a partial antidote to scrofula when the temperament of the person favors its employment, and consequently, when scrofula is the *cause* of gravel, it may be beneficial to the patient to use it. But I am inclined to doubt its success as a remedy when employed alone. Electrical medication seems best adapted to the removal of those constitutional derangements which produce gravel.

Gonorrhœa and Stricture.

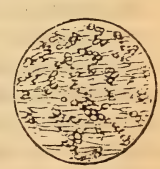
In sexual intercourse, when the discharge of the seminal fluids by the male takes place, these fluids are ejaculated in distinct jets, pro-

pelled by not only the ejaculatory ducts, but by a spasmodic contraction and dilatation of the urethra, each jet being simultaneous with the contraction of this canal. Each dilatation however, creates a vacuum in the urethra, at which moment, if the vaginal secretions are abundant, they are drawn into the urethra; then, if these secretions be infectious, they cause inflammation in the urethra, followed, after the lapse of a few days, by a purulent discharge. This affection is vulgarly called clap, and technically named gonorrhœa. The inapplicability of the latter name might be exhibited here if it would be of any practical use to do so, but so long as this term is popularly understood to apply to an affection like the one under consideration it will be well enough to employ it. When a female has leucorrhœa of a very acrimonious nature this disease may be communicated to the urethra of the male, but it is more commonly contracted in the dens of harlotry, where women, for a pecuniary consideration, give themselves up to the embrace of men for whom they entertain no affection. The gonorrhœa of the courtesan is always more virulent than the leucorrhœa of the respectable female, but the latter sometimes causes in the urethra of the male a disease having all the characteristics of the distemper peculiar to prostitutes. Ordinarily under the microscope, quite a difference is observable between leucorrhœal and gonorrhœal matter. A drop of the leucorrhœal secretion presents the appearance of decayed or vitiated mucus, as represented in figure 119, while that of gonorrhœa appears nearly the same with the exception of possessing something resembling embryonic animalculæ, as represented in figure 120. Men suffering with leucorrhœal or gonorrhœal infection may in turn communicate it to healthy women, but in the latter it is more liable to affect the vagina than the urethra because the last-named canal in the female is shorter and more obscurely located than it is in the male; yet, the infectious matter sometimes finds the female urethra, and when it does it affects her pretty much in the same way that it does the male. The symptoms of gonorrhœa in the male generally make their appearance within a week after an exposure. First an uncomfortable feeling, accompanied with an unnatural redness at the

Fig. 119.

LEUCORRHŒAL MATTER.

Fig. 120.



GONORRHŒAL MATTER.

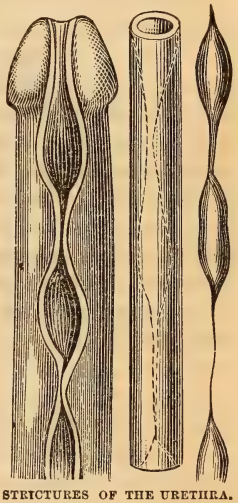
orifice of the penis is experienced. In some cases a sense of itching, and in others pains almost like those caused by the pricking of a needle. Next, a discharge commences from the mouth of the urethra, slight at first, but gradually increasing. The color of this is variable. In some it is white or yellow, in others it is greenish or muddy. There is a tenderness on pressure to the urethra about an inch from the end of the penis, and usually a burning or scalding feeling while urinating. In some aggravated cases of this disease the passing of water is attended with the most intense pain. The inflammation of the urethra is sometimes so great that the canal will not stretch with an erection of the organ, and consequently, when erections do take place, it assumes a curved shape, its extremity being drawn downward by the urethra which, in its inflamed state, possesses none of its natural elasticity. Proceeding thus far, the affection is called chordee, and it is a most distressing one.

The symptoms of gonorrhœa in women are less definite; only an experienced physician can determine, when a woman has a vaginal discharge, whether she is affected with gonorrhœa or leucorrhœa; and when the latter is very acrimonious, the difference is simply in the name, for the effects, when it is communicated to the male, are precisely similar. If it be known that she has been exposed to the former, and in a few days thereafter a discharge, attended with burning and scalding in passing water, follows, it may be safely decided that her disease is gonorrhœa. But she might have this with no other symptom than simply a discharge from the vagina, differing slightly from that attending common leucorrhœa.

Almost every one, "fast enough" in his habits to contract gonorrhœa, generally has in his possession, what some friend has handed him as an "infallible recipe" for its cure. More people are strictured by these "infallible recipes" than by the disease itself. Indeed, between these "recipes" the advertised panaceas of quacks, and the heroic treatment of the regulars, it is almost impossible for the victim of gonorrhœa to escape stricture. *What is stricture of the urethra?* It is, in few words, a partial or entire obliteration of the urethral canal by inflammation or induration of portions of the walls. The annexed illustration, figure 121, represents stricture of the urethra in the male organ. In the first picture the urethra is laid open, to show the boundaries of that canal when obstructed by strictures; there are two prominent ones given. The second picture

presents simply a tube, with dotted lines, exhibiting the points of stricture. The third is intended to represent a cast of the strictured cavity, to show how nearly closed in some cases it becomes. In some cases there is but one stricture, and that is located about an inch or two from the mouth of the urethra. Then, again, it will be found in a few cases that the walls of the urethra are knotted up with them throughout their whole length, so that the canal is about as much obstructed as a stone culvert would be if it were caved in from its opening to its outlet. In some cases, the symptoms of stricture are so painfully unmistakable, that the affected person is unable to pass his water without introducing a small metal or gutta-percha tube in the obstructed canal, as far as the bladder, when the water passes off through this tube. In other persons, the difficulty is indicated by the urine passing out in a divided or spiral stream; while in the incipient stages of the difficulty, its presence is only suspected from the fact that drops of water pass from the urethra in a drizzling way for some little time after urinating.

Fig. 121.



STRICTURES OF THE URETHRA.

While stricture of the urethra is most generally caused by neglected or badly treated gonorrhœa, it may be induced by inflammation of the urethral canal, brought on by other causes, such as colds, urethral catarrh, contusion of the parts, strains, passage of calcareous accretions with the urine, the excessive use of condiments and stimulating drinks. Whatever may be the immediate cause, while that cause exists, internal treatment must be given to modify the acrimony of the urine, to cool and purify the blood, together with local treatment of injections into the urethra of something soothing and disinfecting. When the worst stage of the affection supervenes, and stricture actually takes place, a combination of constitutional and surgical treatment is necessary in the most difficult cases, while in those of not a very serious character, constitutional remedies, together with such local treatment as the patient can administer himself without the aid of a physician or surgeon, may be successfully

prescribed; but in no case of gonorrhœa or other inflammatory affection of the urethra, nor in a case of stricture, should the person affected trust to his own judgment and remedies, unless he be himself an expert in the treatment of these maladies.

Treatment of Diseases of the Urinary Organs.—As a matter of course, what are usually called diuretics, may be appropriately, if discriminatingly, used; but, in most cases, these are too greatly relied upon. In nearly all affections of the urinary organs, the treatment should combine a variety of properties, calculated to improve the blood and the condition of all the secreting organs, and in many cases it must possess those which will act favorably upon the nervous system. Electrical treatment is sometimes necessary. The diet of all persons suffering from this class of difficulties, should be as free from stimulating and heating properties as possible. Condiments, ardent spirits, and the water of limestone regions should be avoided. Those desiring to consult the author in regard to any of the affections treated upon in this chapter, are referred to page 583.

CHAPTER VIII.

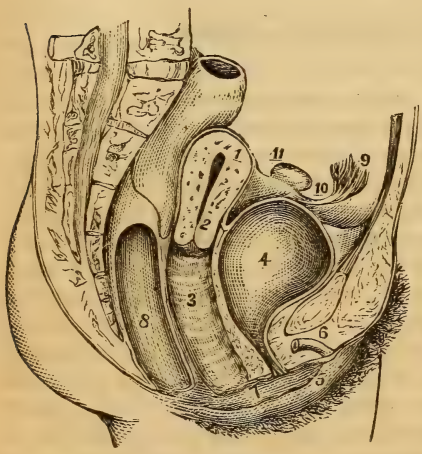
PRIVATE WORDS FOR WOMEN.

WANT the attention and candid consideration of my female readers, to what I have to say regarding the common affections of the amative and procreative organs of their sex. It will not do to pass this subject over as too vulgar or indelicate for investigation. If it be pretended by any woman that she places no value whatever on the enjoyment which may be derived from the reasonable use of healthy procreative organs, she will not certainly be ashamed to admit that physical health is a blessing, and that disease, whether in the head, stomach, or the organs of generation, is an evil which she should employ her faculties of reason to avoid. If the subject is delicate, the complex sexual organization is also delicate, and a vast amount of human suffering, not only to women themselves, but to posterity, results from a foolish squeamishness on the part of many females, old and young, who shut their eyes upon every thing calculated to teach them how to preserve the strength and healthfulness of the organs peculiar to their sex.

It is said "Catherine Beecher goes from one village to another in New England and reports that there are no healthy women to be found within their limits, though the oldest inhabitant remembers one, his grandmother." Now there are reasons for this unhealthiness among females, and it will not extenuate the matter to say that while our grandmothers were apparently more healthy than women at the present day, they were quite as destitute of physiological knowledge. This may be true. But if the advance of civilization carries with it great blessings, it also drags in its trail pernicious evils, which science as well as religion must do much to avert. Our grandmothers were not so much the slaves of pernicious customs and

fashions as those who are in future to become grandmothers, and consequently many precautions which are necessary to maintain health to-day, were not necessary in their day and generation. I do not wish to neglect this opportunity to remark, however, that past generations of women are credited with having possessed more universal health than was actually the case. Only the *living* grandmothers are pointed to and quoted, while it is not borne in mind that many of their generation died even before they became mothers. Young unmarried women, and young mothers, have died in all ages of the world, a large number of whom might have been saved to become grandmothers, had they properly understood and regarded all the laws of life and health, or what are frequently contemptuously termed "new fangled notions" by those whose fast habits of living are as fully up to the customs of civilization as their ideas of physical preservation are far down in fossilization.

Fig. 122.



ORGANS OF WOMAN,

To which allusion is made in this chapter—1, top of the womb; 2, neck of the womb; 3, vagina, or cavity, opening in front, and extending back and encircling the neck of the womb; 4, the bladder, with the urethra; 5, left external lip of the vagina; 6, the clitoris, or the organ in woman corresponding with the head of the penis in man, but without orifice; 7 is intended to designate at its upper part, the location of the hymen in young women; 8, rectum; 9, minute terminal branches of one of the fallopian tubes; 10, one of the fallopian tubes; 11, one of the ovaries.

It is by no means a pleasing diversion to startle the public with the utterance of strange facts, and with opinions entirely at variance with those popularly entertained, nor in placing one's self in a position antagonistic with everybody else, so as to stand like a target for the venomous arrows of envious cotemporaries. But I have so little respect for error, modern or antiquated, I rather my

pen would rust in the inkstand than to use it in pandering to ridiculous fancies and propping up dogmas which, if not bolstered up by a rigid conservatism, would fall through their own inherent rottenness. This book is not written to gloss over prevalent vices or to eulogize customs and views founded only on the whims and caprices of mankind, but to take a common-sense view of the subjects on which it treats.

Uterine diseases are becoming so common, that women entirely exempt from them are more rarely to be met with than those who are suffering to a greater or less degree with them in some form. Nor do these difficulties affect women merely locally. So complex and delicate is the procreative system, and so intimately connected is it by the nervous ramifications with every organ in the body, it cannot be the seat of disease without affecting the general health. Even so natural a process as fœtal formation in the uterus disturbs the health and comfort of nearly every woman who becomes pregnant. Particularly in the first stages of pregnancy, nausea at the stomach and other disagreeable symptoms are usually felt, while some females, through the whole period of gestation, have painful, and others, alarming symptoms. In the case of a woman of Lyle who had five children at one birth, during the last two months of her pregnancy, according to the statement of the *Journal des Annonces*, all objects before her eyes were several times repeated, but after her delivery her sight returned to its natural state. Now, if a woman is so liable to suffer, however slightly, when the womb is simply performing one of the functions it was made to perform, is it not self-evident to every person, that the presence of disease must produce incomparably greater suffering? I can, at least, truthfully affirm that in a large majority of all my female patients, I have found more or less uterine disease; and, further, that it was the intermediate cause of whatever other difficulties existed. What I mean here by intermediate cause, is that which, following nervous and vascular derangements, produces, in turn, other physical ills. Let, then, common sense, rather than preconceived notions or popular prejudices, govern the minds of my female readers, while I proceed to treat of the most common chronic diseases which affect the female organs of procreation.

Derangements of the Monthly Flow.

Every little girl should be early informed by her mother or guardian, that at some time during her girlhood, if her system is in a

healthy condition, a flow of blood will appear from the sexual organs and recur once in about every four weeks. This function is termed menstruation. For want of proper information in this matter, many a frightened girl has resorted to every conceivable device, to check what she supposed to be an unnatural and dangerous hemorrhage; and thereby inaugurated menstrual derangements which have prematurely terminated her life or enfeebled her womanhood. I have been consulted by women of all ages who frankly attributed their physical infirmities to the fact of their having seated themselves in a snow bank, applied ice, or made other cold applications locally, in their frantic endeavors to arrest the first menstrual flow! Intelligent mothers, who in girlhood, escaped this ignorance, this crime against nature, and this penalty, I beg of you, as you value the health and happiness of your daughters, not to take it for granted that they will be as fortunate as you have been, but take it upon yourselves to discharge your whole duty to them, and impart such information in regard to their physical functions as will insure their safety.

Menstruation commences generally between the ages of twelve and fourteen, and there are all kinds of unaccountable variations from this rule. In the year 1858 there was living in the town of Taunton, Mass., at the public charge, a mother who was not quite eleven years of age! One instance came under the author's observation in which the menses made their appearance at the age of only three years, and accompanying the premature advent of this function, was the development of the breasts as at the age of puberty. Another wherein a young woman married at the age of seventeen, and died childless with consumption at about thirty, without having had a menstrual flow, or any known affection of the uterine organs. No examination was made after death, but it is altogether probable that there was some obscure malformation of the upper part of the womb, the fallopian tubes, or the ovaries.

Immediately preceding the first appearance of the menses, girls, reared according to the customs of our as yet imperfect civilization, feel considerable languor, aching in the back, pains in the limbs, chiiliness and restlessness, and, if they come on tardily, pressure of blood in the head, headache and dizziness are usually experienced. The establishment of the function gives relief, and if the person possesses an average degree of health, the flow will take place with uniform periodicity, without unpleasant symptoms, till what is called

the "turn of life," except when interrupted by child-bearing and nursing; and occasionally an instance is met with wherein pregnancy does not put a stop to the menstrual flow.

"Turn of life," is when nature terminates the menstrual function, and woman becomes emancipated from the pains, anxieties, and cares of child-bearing. This takes place in some cases as early as thirty, and as late as fifty-five or sixty; but, in most cases, not far from forty-five. A statement appeared in one of the journals a few years ago, that a woman in Batavia, N. Y., was safely delivered of a male child at the age of sixty-four years! "Extremes meet," when we place this case in contrast with the one mentioned a moment before of the little girl having all the functions of womanhood at the age of three years! Change of life often takes place prematurely in persons who have suffered long from physical weakness. In these cases the flow will make its appearance irregularly, at intervals of several months, and greatly aggravate all difficulties previously existing.

It was once generally supposed, and the same opinion is now entertained by many, that the menstrual flow is in some way produced by the detachment of ova or eggs from the ovaries.

Physiologists thus believing, claim that pregnancy can only take place a little before, or a little after, the menstrual period. But every physician in large practice who has been disposed to give the matter investigation, finds that the ova are developing and descending at no regular period, and that nearly all women are liable to become pregnant at any time. I know that some physicians, recognizing the latter fact, account for it by saying that the zoösperm of the male enters the womb and there awaits the descent of the ova. This is improbable for two reasons, viz.: the zoösperm will not live to exceed thirty-six hours in the vagina, however healthy its secretions, and there is no reason to believe it will live longer in the cavity of the womb without nourishment; and, secondly, the exudation of blood from every part of the lining of the womb when menstruation takes place, would rather have the effect to sweep it out than to retain it, till it could find an ovum. If the two germs coalesce, some few hours or days before menstruation, it may obtain sufficient development and attachment to the walls of the uterus, to remain. But it is unphilosophical to suppose that either the zoösperm or ovum singly and alone could effect lodgment in the womb when the cavity of that organ is perfectly drenched with blood. Then, too, what becomes

of the million of ova or eggs found in the ovaries by the microscope, if only one or even quite a number descend once a month! No, it is evident that the only relation that menstruation sustains to ovalation is, that the excessive presence of blood in the female generative organs, once in about twenty-eight days, stimulates the generation of the female germs. The blood that passes off, exudes from the congested vessels of the womb and from its walls, just as profuse perspiration sometimes bathes the brow, trickles in rivulets down the face, and runs in a stream from the chin. And this profuse exudation is sufficient to sweep every thing from the cavity of the womb, excepting a fœtus which may have obtained sufficient development to possess at least the rudiments of a placenta attached to its walls.

"What is the use of menstruation," some one may inquire, "and what part does it perform in the physical economy?" The doctors do not essay a reply to this question, and it is consequently presumable that they do not know. They look wise, but they do not say any thing. It is perhaps one of those secrets that should not be divulged to the public! I have a theory and I am going to present it: MENSTRUATION IS NATURE'S WASH-DAY. The ovaries above the womb carry on a pretty extensive manufacturing establishment, and throw off the ova and the waste matters, or chips, through the fallopian tubes into the cavity of the uterus. While this work of generation is going on, nature has a wash-day once in about four weeks, and pouring the blood into the womb's cavity, washes its walls, and empties all outside; and in order to waste no vital material the poorest blood in the circulation is used for the purpose, for menstrual blood possesses none of the vital properties peculiar to that taken from the arm, or to that which escapes when hemorrhage occurs. While pregnancy exists, house-cleaning is generally laid aside, for a period of about nine months, and if the activity of the glands of the breasts is sufficient to arrest the production of germs in the ovaries, wash-days are not resumed until the mother has weaned her child, and the suspension of the manufacture of milk in the breasts allows the ovaries to return to their work. When at forty-five, or thereabouts, the shop is permanently closed and ovalation ceases, there is no further necessity for the wash-days, and the menstrual function disappears.

The breasts and the uterine organs of the female exhibit the most intimate relationship. When menstruation commences in girlhood,

the breasts at once begin to enlarge. Diseases of the womb or ovaries often give rise to pain or aching in the breasts. Barrenness, arising from inactive ovaries, arrests the development of the breasts, and in some cases causes the latter to shrink away to simply the prominence of the nipple. I once examined a case of suppurating tumor in the breast of a woman who informed me that when the tumor discharged daily, she did not have her menses, but when it dried up, the menses appeared regularly, and that there had been for several years an alternation between the tumorous and menstrual discharges. With these necessary preliminary observations for the proper understanding of the subject, I will now proceed to speak of the derangements of the menstrual flow.

Irregular and painful menstruation is among the most common of the many menstrual derangements. I group irregular and painful because these symptoms usually present themselves together, although cases of irregular menstruation do occur without pain, and of painful menstruation, without irregularity. Irregular menstruation may result from the deficiency of blood in the system to perform the function so often as once a month, and in this case it may take place without pain. Painful menstruation may arise from inflammation or other disorders of the womb, in cases where nature is strong enough to force all barriers, and present the periodical flow with mathematical regularity. In most cases, however, those causes which are sufficient to produce one, are such as may induce the other.

In some young women, the menses are irregular and painful, because the hymen has not been ruptured, or in consequence of the aperture of the hymen being too small to allow the free passage of the menstrual blood. Then, partial retention and decomposition of the menstrual blood poisons the general circulation, and the impurities so generated and absorbed return to inflame and congest the womb, so that in a little time the menses do not make their appearance periodically, or without pain, even after the hymen has become ruptured. The same condition of things has often been produced by checking the menses in the manner alluded to in the first part of this essay, and by contracting colds just before, or during the flow. Strictures, obstructing the orifice through the neck of the womb are often the cause of painful derangements of the menstrual function. Any thing, in fact, which may obstruct the orifice leading to the cavity of the womb, is liable to disturb the regularity and freedom

of the menstrual flow. Ulcers in the neck of the womb may do this, and so may any tumorous formations therein. In some cases the womb becomes so displaced that the menstrual function is interfered with. For instance, if the womb be so fallen as to imbed the mouth of that organ in the back wall of the vagina, the outlet is as effectually stopped as is the mouth when the hand is closely pressed over it. In such a case as this, the womb becomes engorged with blood before it forces the outlet, and then it passes out sluggishly and in a way to cause the person so affected much distress. In all cases of ulcers or tumors, impurities of the blood give rise to them, and the predisposing cause of displacements of the womb, is want of vitality in the vascular fluids, with which to give strength to that organ, although other causes may have immediately precipitated the difficulty. Congestion and inflammation of the ovaries and womb are frequent causes of painful and irregular menstruation, and these with the causes previously alluded to, are the ones most commonly encountered in medical practice.

Among those causes which appear less frequently, I may give as examples—polypi of the womb, hardening of the inner lining of the uterus, and the periodical shedding of the lining of the interior cavity of the womb. In cases coming under the head last mentioned, the lining in some instances comes away almost complete; in others, it is broken into strips or shreds. Then, cases are met with of fruitless women who become pregnant so far as the union of the zoösperm and ovum are concerned, and nature makes an effort to retain the germ of a new being, but either because of inflammation or weakness of the procreative organs of the female, or in consequence of want of vitality in the fœtus itself, it simply protracts the appearance of the menses for a few days, or a few weeks, when suddenly the flood-gates are opened and the menses make their appearance out of season, and in some cases attended with great pain.

Immoderate flowing, or flooding, may arise from irritability or inflammation of the womb, and when protracted, there is evidence of continued inflammation and congestion. Women of strong amative passion are more predisposed than others to a difficulty of this kind, although instances are not wanting of those possessing little or no passion being thus affected.

Insufficient or slight menstruation may also arise from inflammation and congestion of the womb. In some cases the inflammation

may be so great as to nearly or quite obliterate the cavity of that organ, or to obstruct the outlet, in which case the flow is slight and labored, and in many instances protracted. Slight menstruation may arise from a bloodless condition, the person so affected having really too little blood to perform the function properly. Cases of this kind often suffer from great depression and lassitude at such times. It seems as if the nervous forces and vascular fluids are barely sufficient to carry on the daily work of the body, and when this extra work is added, it can hardly be accomplished. It is as when an engine is producing just enough steam to revolve a certain number of wheels in a factory and an extra belt and wheel are added, when all at once the whole machinery moves sluggishly, and as if about to stop.

Suppressed menstruation may arise from an aggravation of any one or more of the causes already stated in the foregoing; or, it may occur in consequence of conception. If the cause be disease and the person be not bloodless, the face is usually flushed, the head congested, while headache, vertigo, and more or less pain in the ovaries, womb, and back are experienced. If the suppression is not overcome by the healing powers of nature or by proper treatment, hemorrhages of the lungs may take place with the same periodicity that menstruation should appear; or the blood may flow every month from the nostrils, mouth, eyes, stomach, or from the rectum. If suppression be caused by pregnancy, the common symptoms are a gradual change in the redness around the nipple to a purple color; enlargement of the breasts and abdomen; sickness at the stomach mornings; unaccountable aversion to some article of food previously much relished; and longing for something little thought of before. All of these symptoms do not usually manifest themselves in one case, for while nearly all women in this condition have the first three, the others are distributed about, according to individual peculiarities. Then again, the fact should not be overlooked that other causes may produce these very symptoms. For instance, dropsy may enlarge the abdomen and breasts and arrest menstruation. Tumors in the womb or ovaries may produce the same results, and the disturbance of the menstrual flow by any one of these causes, may induce some one or more of the other symptoms which usually attend pregnancy. Even physicians are sometimes obliged to wait and let time determine the question. It may be

asked "What can be done in such cases?" My reply is, give only such remedies as will have a tendency to strengthen and impart health to the procreative apparatus. Indeed, in no case should remedies be given to force the menses. This is the common method of treating such difficulties, I know, but not by any means a safe one; and no physician can reasonably excuse himself for the act of effecting abortion on the plea that he did not positively know pregnancy existed in a given case. It is sufficient, and much better for the patient, to use remedies that have a tendency to impart health to the womb, ovaries, and contiguous organs. This treatment can do no harm when pregnancy is the cause, and will allow it to go on to the full natural period with no injury to the fœtus, while in cases of disease, if properly selected and prepared, they will remove the obstructions and prepare the circulation for the function so that nature will be enabled to resume it at as early a day as possible without disturbance to the general health.

Menstrual derangements should never be neglected, for in all cases, excepting suppression by pregnancy, they lead to other diseases which are liable to prove troublesome, and perhaps fatal. In women of slender figure they are apt to induce consumption either of the blood or lungs; in those of full habit, they are liable to cause affections of the brain, liver, heart, and stomach, predisposing these organs to congestion and the person affected to apoplexy. In many cases, when neglected, they induce hemorrhages of a troublesome and dangerous character. Answers to the questions given in another place in this book will enable the author in all cases to discover the causes and suggest the best means of overcoming them.

Leucorrhœa.

By some this disease is called fluor albus; but among women generally, it is better known by the name of "whites." It exhibits itself usually at the outset by a slight discharge of a thin, watery fluid from the vagina. In time this discharge thickens and becomes more copious. In its advanced stages it may present a green, a yellow, a brown, or a florid appearance. Often in one case the discharge will change from time to time not only in its color, but in its consistency and quantity. The disease is usually accompanied with a great degree of lassitude, particularly in the morning; fainting; variable appetite; palpitation of the heart; shortness of breath;

paleness; dark circles around the eyes; pain in the back and loins; and, in many instances, smarting of the water, as in a case of unmistakable gonorrhœa. Indeed, in aggravated cases, it possesses all the acrimony and characteristics of the last-named disease. As I have already referred to the similiarity of gonorrhœa and leucorrhœa, when the latter possesses peculiar acrimony, I need not repeat it here. What I allude to is presented under the head of Gonorrhœa and Stricture in the preceding chapter. Considering the infectious qualities of leucorrhœa in many instances, it is well to suggest to married people in this connection, not to be too suspicious of each other when something having the appearance of gonorrhœa presents itself. I have on several occasions been called upon by men suffering with discharges from the urethra, who were jealous enough to suspect their wives of infidelity. On the other hand I have been consulted by women, who on the first appearance of an acrimonious leucorrhœa, imagined that their husbands had been up to something not exactly consistent with matrimonial fidelity. An excellent imitation of gonorrhœa may be often worked up between husband and wife when one is scrofulous. If both parties possess a scrofulous diathesis, the chances are still greater that an affection of this kind may be generated.

Leucorrhœa is a disease which is generally very prostrating in its effects. Now and then a woman may be met with who preserves all the bloom and exuberance of health while a discharge of this kind is going on daily; but these are rare exceptions to a general rule; for, in by far the greater number of cases, the difficulty is attended with all the symptoms peculiar to it, and in time with those of a more distressing character. The constant drain, if not checked, leads to general uterine derangements; irritability of mind; nervousness; hysteria; difficult respiration; and consumption. In dissecting a subject who has died of the effects of this distemper, the surface of the uterus presents a pale, relaxed, and flabby appearance. It is, indeed, an affection in women corresponding in many respects with spermatorrhœa, or involuntary seminal emissions in men; and it gradually undermines the constitution of females who are its victims.

The predisposing causes which produce leucorrhœa are vascular impurities and nervous derangements, and then there are exciting or immediate causes, the most common of which I will examine. (I may add here that all exciting causes derange the nervous and vascular

health, and that consequently there exists a reciprocal relation between predisposing and immediate causes.)

It is humiliating to say that masturbation among young ladies is a prolific cause. But the truth should be told for the benefit of those who, from ignorance of its consequences, are slaves to the vice, and nowhere can it be revealed so appropriately as in the pages of a medical work. Under sixteen or eighteen years of age, girls are not so much addicted to the pernicious habit as boys; but after that age, and until marriage, the rule is reversed. This anomaly can be accounted for. Rakish young men are always admitted to good society, while the appearance of wildness among young ladies awakens the bitter tongue of slander, which only the most modest and retiring demeanor on their part can silence, while defiance to it banishes them from all good society. Thus the hot blood of budding man and womanhood, stimulated by exciting food, drinks, and condiments, leads the young man to the embraces of the harlot, and the young woman to the vices of the secret chamber, so that the former sacrifices his moral sense, and the latter her physical bloom and health. True, the young man exposes himself to a fatal inoculation of venereal poison; but with all this risk, his vice, so far as the mental and bodily health is concerned, is the safer.

Only recently I was consulted by a father concerning the poor health of his two daughters, aged respectively, twenty-two and twenty-four years. From the description of their cases, they appeared to be physical wrecks, suffering with almost every complication that ever afflicted poor mortals. I saw by an analysis of their symptoms, that although nervous and vascular disturbances were the present causes of their complaints, self-abuse had induced these. I informed the father as to the nature of the present causes, but to spare the feelings of the young ladies, I dropped a private note to each of them, revealing the whole truth in regard to the terrible vice which was destroying them. With commendable frankness they responded to my letters, acknowledging the accusation, and informed me of their ignorance of its hurtfulness. They further stated that they had long been troubled with leucorrhœa, and that they were even disturbed with lascivious dreams, from which they were awakened in the highest state of amative excitement. Many similar cases have been presented to me for my opinion and medical aid, but never before any so hopeless as those I have just mentioned,

for they were on the verge of insanity, and already affected with occasional mental hallucinations as terrible as those which attack the degraded inebriate.

Sexual excesses among the married, bad habits for the prevention of offspring, cohabitation with uncongenial husbands, for whom no love is entertained, sedentary habits, retention of part of the menstrual blood in the folds of the vagina, are also among the immediate or exciting causes of leucorrhœa.

If proper regard were paid to cleanliness (excuse me, ladies, but it is so), there would be much less liability to this debilitating distemper. Every female who has arrived at the age of puberty should thoroughly syringe the vagina with pure water *every morning*, excepting while having her menses, and at the same time apply plenty of soap and water to the labia or lips of the vagina, for there are located about the clitoris and contiguous parts, glands and follicles which secrete an oily fluid for the preservation of their moisture. If this secretion is allowed to remain too long, it undergoes a chemical change, which imparts to it not only a disagreeable odor, but an acrimony which is liable to induce irritation. All oily substances become rancid and disagreeable by age and neglect, and these secretions, provided by nature for moistening, softening, and preserving the health of these parts, are subject to the same law. When the vagina and labia are kept cleanly, they are as pure and as sweet as the mouth and lips of the face when they are properly taken care of.

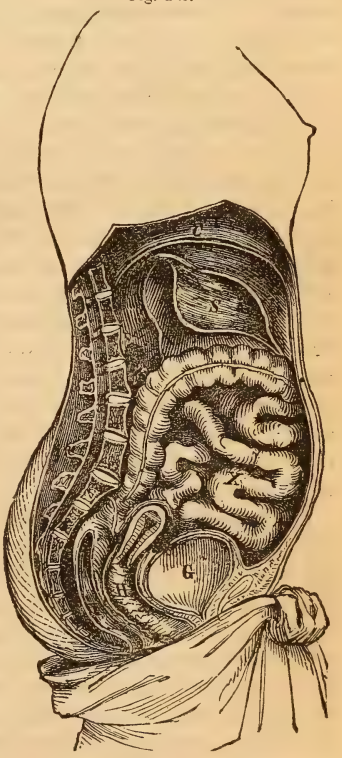
In a previous edition of this work I spoke adversely to an excessive use of water in the vagina immediately after the copulative act, for the prevention of conception, and I may call attention to this point again. In order that I may not appear inconsistent, let me here explain that immediately after great amative excitement, the nerves of the procreative organs and the lining of the vagina are in an unfit condition to receive a deluge of any fluid. If the fluid be cold, it gives a shock to the excited nerves which, if frequently repeated, in time deadens their sensibility, and whether cold or warm, the absorbents of the lining membrane are so active at such a moment that considerable quantities of the fluid are absorbed, greatly to the ultimate injury of the general health. When, however, the nerves and membranes of these organs are not under the influence of amative excitement, or just recovering from it, they may be

cleansed as frequently as the mouth may be, not only without injury, but with decided benefit. Within two days after the cessation of the flow of the menses, there should be a general drenching of the walls of the vagina with castile soap-suds, followed with clear water, so as to remove every particle of menstrual blood that may linger, and then every day until nearly time for the menses to reappear, copious injections of water should be made to preserve the healthiness and cleanliness of the parts. "But, Doctor, you would not thus advise unmarried women, would you?" Certainly I would, simply because it is just as necessary for them as for married women. Health is of more consequence than the whims of society. As I am a physician I shall not feign ignorance of the anatomy or structure of the orifice of the vagina in young women, nor shall I, as an inhabitant of this mundane sphere, where a great many funny customs and foolish notions exist, overlook the supposed evidence of virginity which young husbands in their own immaculate purity (?) usually expect to find in their newly made brides. Nor can I, in justice to my views, ignore the fact which my extended observation as a physician has presented, that many a young husband has been disappointed in finding such evidence, when his bride was as innocent as an infant, and she consequently, the victim of the most unjust and shameful suspicion.

It is a custom more in keeping with the drolleries and phantasms of the barbarians than with the common sense and scientific light of the nineteenth century, to esteem those only as virgins who have an unruptured hymen. The Lex Africanus describes one of the wedding customs of the Africans as follows: "After they were married, the bridegroom and bride were shut up in a chamber while the wedding dinner was preparing, and an old woman stood by the door to receive from the bridegroom a sheet having the bloody tokens of the wife's virginity, which she showed in triumph to all the guests, and then they might feast with joy; but, then, if there was no blood to be seen, the disappointed guests went home sadly without their dinner." Now this custom, although revolting to people of intelligence, is excusable in heathens; but does it look well for those enjoying the light of civilization to so far imitate it as to require an unbroken hymen as an evidence of virginity? Physicians know it is a very fallible test of virginity; that the hymen is often ruptured by various accidents; that cutaneous eruptions near the labia many

times exist of such an irritating nature that the hymen is broken by the incessant scratchings of the victim; that the hymen is often destroyed by surgical operations in childhood; that sneezing, coughing, violent straining, and any number of other causes may break it; that the test is in fact *no test at all*, and only subjects those who happen to have the hymen broken to unjust and cruel suspicions. It is only a few days since I was called upon to examine a little girl only seven years of age, whose hymen had been destroyed in consequence of an irritating eruption on the labia causing her to scratch and frictionize the parts even in her sleep, and I could mention many other instances coming under my observation in which the hymen had been destroyed by the same cause or by accident. Why, then, preserve the hymen? Why regard it as an evidence of virginity when such a test only excites mortification and a sense of disgrace in a large proportion of all young females, not a small number of whom have always been chaste and unexceptionable in their character? Besides, the mortification of a broken hymen only falls on those the most innocent, and such as have become the least acquainted with the vices of the world. The courtesan and mistress, and even respectable young women, who have eaten of the fruit of knowledge and trespassed against social statutes, know how to resort to deceptive means to throw off all suspicion when they are married. There are inventions devised for the express purpose of deceiving young husbands, and so well do they effect their object,

Fig. 123.



NATURAL POSITION OF THE WOMB.
H, the vagina, and above it the uterus; G, the bladder; I, the rectum.

that those men who actually know of their existence may be completely deceived by them. Even a physician may be hoodwinked by these artifices unless he ungallantly requires his bride to submit to an examination. Now, as a rule, those females who are "fast" enough to have carnal connection with a man, are also sharp enough to possess themselves of these devices, while only those who have been innocent of such wildness enter marriage so unsophisticated as to be ignorant of these things.

In asserting that the hymen is a cruel and unreliable test of virginity, I do not stand alone. Every intelligent physician, particularly in extensive practice, knows the fact, if deference to popular prejudice leads him to conceal it. But many have freely proclaimed it. Pancoast states—"The presence of the hymen was formerly considered a certain test for virginity, on account of its being ruptured during coition. This idea has long since been repudiated, for it is not unfrequently lost through accident, disease, etc. In many instances it does not give way in the first or subsequent connections and pregnancy. In such cases the spermatozoa of the male work themselves through the opening of the hymen, and finally pass up through the vagina, uterus, and into the Fallopian tubes, where impregnation occurs. Therefore medical writers no longer regard the presence of the hymen a proof of chastity or its absence a proof of immorality."

Dr. Ferguson says—"The sides of the vagina are in contact ordinarily, but it is capable of enormous distention and of again returning to its natural size. The opening is closed by a fold of the mucous membrane, which is called the hymen. This membrane is easily ruptured, or it may become so relaxed as scarcely to be perceptible, *which will account for its rarity in adults.* From very early times it has been made the test of virginity, its absence being considered conclusive proof of sexual intercourse having taken place. Modern investigations have proved, not only that it may be destroyed by many causes unconnected with sexual indulgence, but that intercourse may take place, followed by pregnancy, without its destruction. *It is, therefore, of no value as a test.*"

Dr. Parr states—"The hymen naturally shrinks with years, or is torn by straining, and often disappears at an early age. *It can therefore be no proof of virginity.*"

Dr. Wilson remarks, that "the hymen *must not be considered a necessary accompaniment of virginity*, for its existence is very un-

certain. When present it assumes a variety of appearances; it may be a membraneous fringe with a round opening in the centre; or a semilunar fold leaving an opening in front, or a transverse septum leaving an opening both in front and behind; or a vertical, bored with an opening on either side."

The natural purpose of the hymen is to protect from colds and exposures the sensitive sexual organization of the female before the age of puberty, for until this is sufficiently developed to perform the menstrual function it is extremely delicate. The provisions of nature are admirably calculated to arouse in the minds of intelligent beings veneration for the beneficent Creator whose handiworks are exhibited on every side. The "leaves of the common chickweed approach each other in pairs, so as to include within their upper surfaces the tender rudiments of the young shoot." The bud of every flower is so enveloped as to protect its delicate internal structure till maturity, when it bursts forth with its fresh beauty and imparts delightful fragrance to every passing zephyr. Nuts of every variety are provided with an outer bur or shuck to protect them in their embryonic state, and by the time the autumnal frosts come, the shell which contains the meat becomes strong enough without protection, so that the outer one can be dispensed with.

It is difficult to tell how much the hymen may have to do in shielding the procreative organs of females from exposure and disease, during the early period of their development. It is only known that young girls who, through any accident, have lost this protecting membrane, are more liable to uterine affections. But the age of puberty, indicated by the appearance of the menses, is one in which the hymen may be altogether dispensed with; for whether accident or marriage happens to the young female within six days or six years after the appearance of the menses, it is certain her reproductive organs are fully matured, and that the hymen has fully subserved the purpose for which it was made. In some cases the hymen proves so great an obstacle to the flow of the menses that the whole vaginal canal becomes blocked up, when hysteria and other spasmodic affections ensue. Under such circumstances it must necessarily be ruptured, and, when very strong, with the knife of the surgeon. When the hymen remains unbroken until after marriage, it occasionally occurs that it has become so cartilaginous by age that the vagina cannot be entered, in which case the unfortunate bride is

obliged to submit to a surgical operation for its removal. Now, if this membrane was not so carefully protected and valued, such annoyances as these would be avoided, while the hundreds and thousands who have, by accident, ruptured it, would not be the objects of crushing suspicion on the part of those who possess so little anatomical knowledge that they are not aware such accidents ever happen. The commencement of menstruation marks a new era in the life of a female. She becomes more graceful in her manners; her face changes; her breasts rapidly develop; she loses her childish airs and becomes more attractive and womanly. It is then that she should be treated as a woman, not only socially, but hygienically and medically.

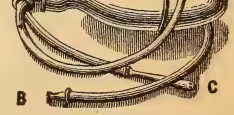
The menstrual blood was supposed by the ancient Jews and the medical men of Arabia, to possess peculiar malignant properties, and in some countries the laws and customs required that females should be cloistered during the menstrual periods. In Isaiah, xxx. 22, the writer speaks of the defilement of graven images, which shall be cast away as a menstruous cloth; and in Ezekiel, xviii. 6, and xxxvi. 17, allusions of the same import are made. "It was formerly supposed, and so stated by Pliny and others, that the menstrual blood contained principles of a noxious and poisonous character. Pliny informs us that 'the presence of a menstrual woman turns wine sour, causes trees to shed their fruit, parches up their young fruit, and makes them forever barren; dims the splendor of mirrors and the polish of ivory, turns the edge of sharpened iron, converts brass into rust, and is the cause of canine rabies.'"

While I have no respect for antiquated notions, unless sustained by reason and philosophy, I am disposed to agree with these ancient views so far as this: that the menstrual blood becomes acrimonious if it is permitted to remain and decompose in the folds of the female vagina, and that leucorrhœa and ulceration of the vagina or womb are often the results of the excoriating properties developed by particles retained in the vagina, and particularly in that of young females, whose hymens have not been ruptured. My observation fully sustains these conclusions, but I do not think the menstrual blood malignant or injurious, if a woman takes care that the vaginal cavity is cleared of all relics of the fluid.

Mankind entertain a thousand whims, and I am not disposed in this work to meddle with any which do not interfere with cleanliness

and good health; but I consider it my prerogative to attack those which do interfere with physical development, and the comfort and health of the human race; and I cannot but regard that one which leads a young husband to suspiciously and sneakingly seek to know if his young bride has an unruptured hymen, as humiliating and degrading to all the nobler attributes of a moral and intellectual being. My advice therefore is, that single females, as well as married, should keep the vagina cleansed of every decomposing particle of menstrual blood, and that the female syringe should be thoroughly used within forty-eight hours after the menses have ceased. The more efficient the instrument used the better. In fact, the common glass and metallic syringes are little better than none. The various patterns of india-rubber syringes are the best, because they can throw such a volume of water, and that, too, with so much force, that every particle of decomposing blood can be washed away. The annexed cut represents the best article of the kind, considering its simplicity and little liability to get out of order (see page 911).

FIG. 194.



RUBBER SYRINGE.

By compressing the oblong rubber-ball, A, the water is drawn in at B, and expelled at C. From B to C, is a continuous rubber tube, which is wound up so as not to take up too much room in the illustration.

Young unmarried women, of course, value (or at least should) as of first and paramount importance in the regulation of their customs and habits, the advice of intelligent and Christian mothers. I would not urge upon them the use of the syringe at the end of each monthly period without the consent of their maternal guardians. But may I not hope that sensible mothers who watch with anxious eye the first symptoms of disease and decline in daughters just blooming into womanhood, will take a practical view of the hints I have given, and advise them to regard more scrupulously the requisites of health than the morbid and foolish notions of sensual mankind! As for married women, there is no possible excuse for their non-observance of the most rigid rules for the maintenance of cleanliness. They should use the female syringe very thoroughly at the end of each catamenial flow, with soap and water, and then daily with pure water, as before directed.

The use of astringent injections is the most popular mode of treating leucorrhœa, but however much relief may be obtained in this

way, it is usually of the most temporary nature, unless accompanied with such medicaments as will improve the general health and impart vitality to the whole procreative system. A bad case of leucorrhœa is of quite too threatening a nature to trifle with; and in its incipient stages, it had much better receive skillful treatment, for it is liable at any time to assume a troublesome and prostrating form, which may end in premature decline.

Falling of the Womb.

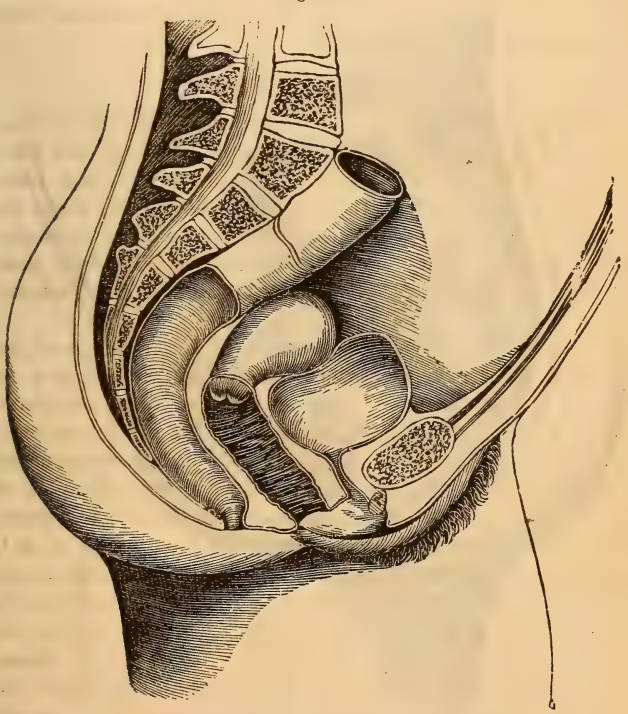
This difficulty may almost be said to be co-existent with civilization. Travelers report that among the women of savage and semi-barbarous countries this affection is hardly known. This fact, taken in conjunction with the proverbial one that falling of the womb is a prevalent disease with women living under our system of society, furnishes a subject worthy of the consideration of medical men, social reformers, and of those who have the good of humanity at heart.

When the abdominal muscles, or those of the womb itself, become relaxed by insufficient nervous stimuli; when the vagina becomes weak through the debilitating effects of leucorrhœa so that it fails to do its part in sustaining in its place the organ suspended within its walls; when a pernicious fashion induces a woman of not very strong muscular organization to compress her waist so as to press down the stomach and bowels below their normal position; when constipation engorges the intestines with fecal matter so as to produce a pressure at the top or back of the womb; or when a pregnant female, bound on expelling from the uterus the embryo of a human being, resorts to some means to effect abortion; through any one or more of these causes, the advent of a distressing disease, usually termed prolapsus uteri, may very reasonably be looked for. Although more common to married women, the unmarried are not exempt from it. If correct statistics of the prevalence of this disease could be presented, they would astonish the reader.

The position of the womb when it is prolapsed is various. In some cases it falls over to one side or the other; sometimes it turns almost a complete somersault; in a few cases there will be found to be a prolapsus not only of the womb, but of the vagina, so that the neck of the womb absolutely protrudes; in some cases it is found to lie crosswise—the top pressing one side of the vagina, and the

neck the other; or the neck may press the back wall of the vagina while the top lies against the front wall, or vice versa. In most cases the womb falls either forward or backward, keeping rather more of an oblique than a horizontal position. The illustration, Fig. 125,

Fig. 125.

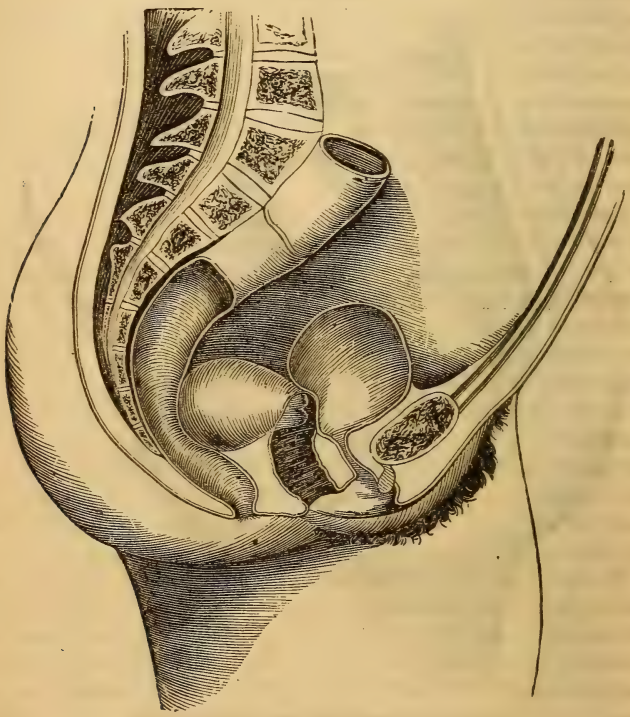


THE WOMB FALLEN FORWARD ON THE BLADDER.

represents pretty well the position of the womb when it is fallen forward. When the organ occupies this position, the mouth of the womb is generally found to be somewhat imbedded in the back wall of the vagina. This point is not so well illustrated in the figure presented. Its position, however, against the bladder is well shown, and when in this position it causes a frequent desire for micturition. When fallen backward, as represented in Fig. 126, it then interferes

with the free expulsion of the fæces by its pressure against the rectum, thereby predisposing the one affected to constipation; and if, as is sometimes the case in this unnatural position, the neck of the womb presses against the neck of the bladder, micturition becomes difficult,

Fig. 126.



THE WOMB FALLEN BACKWARD AGAINST THE RECTUM.

and at times painful. This may also be the case when the womb is fallen forward, if the muscular relaxation is so great as to drop the womb below the upper or main part of the bladder. The common symptoms of falling of the womb are dragging or bearing-down sensations in the lower part of the abdomen; pain and numbness in the limbs; weakness in the loins and lower part of the back; general

debility, and nervous irritability. I say these are the common symptoms, but I should here mention that I have often encountered cases of prolapsus of the womb in my practice, in which there were no unpleasant local symptoms whatever. The displacement had occurred at such an early age that the system had been made gradually to tolerate its unnatural position. In these cases, when the physician suspects something wrong about the uterine organs, the patient quickly informs him that she is perfectly sound in that locality; and she has reason to think so because she has no one of the symptoms common to an affection of this kind; but an examination reveals the correctness of her physician's opinion; and it is generally found in cases of this kind that their ill-health proceeds directly or indirectly from the uterine displacement.

Leucorrhœa generally precedes, and in most cases attends, falling of the womb. When chronic irritation or inflammation, with more or less congestion, are also present, existence is a burden, and married life a curse rather than a blessing. Unless relieved or cured, months or years of misery, according to the endurance of the sufferer, are fastened upon her, until consumption, or some other disease in a fatal form, forever relieves her of her physical distress.

In the incipient stages of the disease the exercise of walking is necessary to keep up what is left of the muscular strength; but in advanced stages this exercise is generally too painful to be endured, and in such cases frequent manipulation of the abdomen with the hand should be resorted to. All the muscles may indeed be benefited by pressure and manipulation by a healthy hand.

To cure prolapsus, various utero-abdominal (should read abominable) supporters or pessaries have been invented, more for the purpose of making money than doing good. These mechanical means are irritating to the womb and vagina, which are so delicately organized and permeated with sensitive nerves, that constant contact with any wood, glass, earthen, or metallic contrivance used to support the parts, can only give temporary relief and ultimate injury in most cases; while instances do occur in which the first effects are so irritating and distressing that the patient dies from inflammation induced thereby. These worse than senseless things should be dispensed with entirely, and the disease treated locally and constitutionally, as the common sense of the skillful physician naturally suggests.

Ulceration of the Womb.

This disease is common to women of a scrofulous diathesis; a venereal taint in the system may also produce it. Other less virulent impurities of the blood occasionally induce it. The neck of the uterus is its most common location, and it is attended with an offensive discharge from the vagina, and much burning heat and pain in the region of the abdomen. Aside from its debilitating, painful, and offensive effects, it is liable to lead ultimately to cancer of the womb, a distressing disease which is generally difficult to cure, particularly in its advanced stages. Taken in season, ulceration may be easily eradicated, and even cases of cancer of the womb are not always incurable. When either ulceration or cancer affect the vagina or womb, the acrimonious nature of the purulent secretions are such as to impart disease to the organ of the male in copulation, unless the membraneous envelope is used.

Polypus of the Womb.

This is a tumorous affection characterized by the growth of fleshy fungus, which often attains great size. This disease seldom occurs, except in cases which are affected more or less with scrofula. In such cases, often more than one tumor presents itself, some of which are hard and firm in their fibres, and others soft and spongy. Females affected with this difficulty are often suspected of pregnancy. I was once called upon by a lady affected with polypus of the womb, who had been pronounced pregnant by several physicians, some of whom had made private examinations. Had her disease been permitted to run on until a period when time would have disclosed the mistake, she might have become hopelessly incurable. A thorough examination satisfied me at once as to the nature of her disease, and I was enabled to prescribe remedies appropriate thereto.

Dropsy of the Womb.

This is a uterine disease which is not so common as the ones I have previously considered. Occasionally, cases are met with in a large practice, and in mine I have found it quite as prevalent as

other dropsical affections. This disease often leads to the suspicion that the invalid is pregnant, and sometimes physicians who ought to discriminate more correctly, are deceived by it. It was owing to the palpable ignorance of those who were considered the first physicians of England, that Lady Flora Hastings, a maid of honor to Queen Victoria, was driven in disgrace from the court. She was supposed to be *enceinte*, and being a single lady, for her to become a mother would have had a most prejudicial effect upon the character of the court. The most notable matrons and physicians were summoned to make an examination, and their decision was confirmatory of the terrible suspicion. The broken-hearted lady soon afterward died of dropsy of the womb, which had deceived her medical examiners. Greater medical stupidity cannot be conceived of! Had her physicians possessed the skill which they should have possessed, to wisely discharge the responsible duties of their position, the disease of the lady would have been readily detected, and her life and reputation saved. In both polypus and dropsy of the womb, the delicacy of ladies to submit to private examinations, and the destitution of diagnostic skill in the medical profession, lead to some mischievous blunders. Although I seldom find it necessary to resort to such examinations, to decide as to the true nature of the disease, cases occasionally occur in which such examinations are necessary; and when necessary, the good sense of the patient should overcome all feelings of delicacy. I had opportunity once, to admire the courage and good sense of a very respectable and modest young woman of sixteen or seventeen, who had cancer on one of the lips of the vagina, which was so far advanced as to require local treatment. Although she possessed all the modesty and refinement common to the well-bred of her sex, she submitted without objection, and with commendable heroism, two or three times a week to the necessary topical treatment; and I am fully convinced that my success in treating her case, was greatly owing to the freedom which enabled me to give the disease the attention it required. Had she been more prudish than sensible, there can be no doubt that her distressing affection would have proved fatal.

When women suffering with uterine difficulties apply to a physician, they must bear in mind that there is no part of their system with which he is not thoroughly familiar.

Chronic Inflammation of the Womb.

When, succeeding childbirth, abortion, contusion, or other cause, acute inflammation ensues, if not properly treated by the medical attendant, either death, or chronic inflammation of that organ, is the result. The chronic form of the disease is characterized by soreness in the region of the uterus, great pain in cohabitation, nervousness, fretfulness, and, in many cases, pains in the breast. Sometimes the uterus will enlarge, and the courses become irregular, scanty, or profuse. The inflamed and swollen uterus may press upon the bladder so as to interfere, more or less, with the urinary organs. This disease may be aggravated by hot and stimulating foods, condiments, violent exercise, and grief. Local treatment, alone, cannot cure chronic inflammation of the womb, for in all cases of this kind, there are constitutional disturbances which must be removed.

Vaginal Affections.

It would hardly seem necessary at this point in this chapter, to explain what the vagina is; but still it may be that some have failed to draw any inferences from the preceding matter, relative to its location, construction, or office. I will therefore describe it as a canal of cylindrical form, five or six inches in length, situated between the bladder and rectum, its mouth forming the front external opening below the pubes, and its upper extremity encircling the neck of the womb as illustrated, not only in some figures presented in previous essays in this chapter, but also in those representing the effects of constipation upon the procreative organs. It is lined, internally, by a mucous membrane, and around this membrane is a layer of spongy, erectile tissue. It is provided with muscles, veins, and nerves, and its office is to receive the male organ in sexual intercourse, and conduct the spermatic fluid to the womb for the purpose of reproduction.

The membranes, muscles, nerves, etc., are liable to be affected by disease. The lining may be the seat of ulceration, in which case, smarting and pain are experienced, and a disagreeable discharge from the orifice observed, as when the womb is ulcerated. The lining is sometimes attacked by eruptions, causing the most intense itching, and when, to allay this itching, the membrane is frictionized, a

swelling or puffiness arises, attended with distressing smarting. In some cases, this eruption extends to the lips of the vagina; and when these parts are rubbed or scratched to allay the itching sensation, they become greatly inflamed and swollen. When either ulceration or eruption affects the vagina it indicates an impure condition of blood, from which the difficulty arises; and, although the local affection may be somewhat benefited by washes and injections, constitutional treatment is necessary to effect a permanent cure. In cases of ulceration, astringent injections of decoctions of white-oak bark, or of alum water, or of a weak solution of nitrate of silver, are sometimes useful. When the vagina and its external parts are affected by irritation and itching, a free use of castile soap-suds as an injection, and as a wash, frequently allays the troublesome symptoms. A weak solution of sugar of lead, may also be applied in cases of this kind, as a local application; but whatever is done locally should be accompanied with thorough treatment for the blood. The muscles of the vagina are so much relaxed sometimes, by leucorrhœa and other causes, that the lining becomes loose and flabby, and, in some cases, actually protrudes. Electricity, locally applied, is advantageous in affections of this kind; but even this should be accompanied with internal treatment calculated to strengthen and build up the muscular system.

Nymphomania.

This is a name given to a disease not unfrequently occurring among females of both high and humble life, and which is characterized by a violent desire for coition. Hooper describes it as "a species of madness, or a high degree of hysterics. Its presence is known by the wanton behavior of the patient; she speaks and acts with unrestrained obscenity, and as the disorder increases, she scolds, cries, and laughs by turns. While reason is retained she is silent, and seems melancholy, but her eyes discover an unusual wantonness. The symptoms are better or worse until the greatest degree of the disorder approaches, and then, by every word and action, her condition is too manifest."

Hooper's description applies, of course, to the most marked cases of nymphomania. But it exists in various degrees of intensity, and in the mildest cases causes only desire for excessive venery, without symptoms which betray her feelings to those about her. The cause

of this singular difficulty is altogether attributed by medical writers to a local irritability of the procreative organs. I cannot acquiesce fully in this explanation. That nervous irritability, or, rather, that too much nervous or electrical stimulus is present in these organs there can be no doubt; but an inharmonious distribution of the nervous forces among the organs of the brain, manifestly precedes or co-operates with the former condition. It is a fact that ought to be well understood, that the nervous forces, sometimes in consequence of some violation of nature's laws, are withdrawn, or partially so, from one or more organs, and the excess given to another, so that, while one or more may be deprived, or nearly so, of their vitalizing or stimulating presence, the recipient of the excess is excited to an unusual degree. Thus one or more of the organs of the brain may become abnormally excited at the expense of inactivity to the rest, so that a person will be fanatical on some one subject, and think and talk of little else. In brief, he has a "hobby." In consequence of this mental inharmony, growing out of an unequal distribution of the nervous forces among the organs of the brain, we often meet with crazy poets, fanatical religionists, mad politicians, luny inventors, harum-scarum doctors, etc., etc. Now, when the causes of these peculiar conditions of mind are understood, according to my explanation, is it not easy to see how an excess of nervous force may be sent to the organ of amativeness, at the expense of other organs of the brain? If the reasoning and moral organs are robbed to supply this excess, how natural that a woman who may have previously sustained a spotless character for modesty and reserve, should, with such an abnormal condition of the mental faculties, exhibit uncontrollable emotions in the presence of men, in extreme cases, or a disposition to indulge to excess in venereal pleasure, with husband or paramour, when able to restrain her emotions in company. The intellectual organs are almost paralyzed, and the nervous or electrical stimulus which should give them activity is expended upon amativeness; and this organ, very naturally, expends its excess upon the nerves centering in the sexual or procreative system, of which it is the head and director.

Females laboring under nymphomania deserve rather the sympathy than the condemnation of friends. It is a species of monomania, and as such should shield its victim from unjust and uncharitable aspersions.

When the blood is diseased and nymphomania exists, inflammation, irritation, and sometimes ulceration, locate about the pudenda, vagina, and uterus, rendering the parts sore and extremely tender. But this condition of the organ is not sufficient to deter the female from the act of coition if the opportunity offers. A very respectable married woman, afflicted with this malady, whose desire for coition was incessant, in describing her symptoms to me in a letter, said: "In describing myself, I cannot think of any better way of expressing myself than to say it feels good to be hurt." This quaint and frank statement conveys the idea exactly, for the nervous excitability of the organs of amativeness and the sexual parts, demands gratification, however sensitive the latter may become by the presence of ulcerous or inflammatory diseases.

My mode of treating nymphomania without complications, is such administrations of electricity as are calculated to equalize the nervous circulation, and draw off the excess from the organ of amativeness and the sexual parts. In complications growing out of blood impurities, the treatment must combine both electrical and blood-purifying remedies. My theory of the disease is original, as is also my mode of treating it, but my success in its management convinces me that both are correct.

Amorous Dreams.

Women, as well as men, are subject to these, and they are nearly as debilitating to the former as they are to the latter. Although no very vital secretions are lost by a woman so affected, the vital or nervous forces are expended without recompense, as in masturbation. An amorous dream is indeed practically an involuntary act of masturbation. It has often been remarked that no exercise is so tiresome to the muscular system as to kick or strike at nothing. All know, too, how it wrenches one to step down a foot or two while walking. What this wrench is to the muscular system, an amative dream is to the nervous system. A volley of nervous force is gathered up from all parts of the body, and directed with the greatest impetuosity toward a supposed companion in the sexual embrace, and it passes off with violence and is lost, while the compensative nervous or electrical volley from the supposed companion is not received. In men this nervous loss is accompanied with an expenditure of some of the most vital fluids of the system—those secreted

by the testicular glands, and which are composed of the most vital elements of the blood. In women, the nervous waste is simply accompanied with an expenditure of glandular secretions of not much more vital value than the saliva or spittle of the mouth. But the nervous waste—the nervous shock—the wrench to the magnetic system is such as will, if frequently repeated, prostrate the nervous energy, destroy the memory, and weaken all the faculties of the mind.

Many married women have these dreams who do not enjoy natural sexual intercourse. The function of the amative organs is so perverted that the imagination can affect those organs when contact with a male companion cannot arouse them. This morbid and unnatural condition has, in most cases where it exists, been caused by masturbation. The amative organs of the brain, and those occupying their proper position in the body below, have been trained as it were to act alone or without the help of a companion of the opposite sex; and after marriage it is found, much to the mortification and disappointment of the wife, that she is unable to participate in the pleasures of the sexual act, while her dreams are made delirious with imaginary pleasure. It seems as if the erectile muscle and tissue of the clitoris, labia, and vagina had become so accustomed to receive their inspiration or magnetism from, to use a homely illustration, the back-door, that they are perfectly dead to any raps at the door in front. The organs have been accustomed to simply unmagnetic friction locally, and that of the most violent nature, so that the milder friction of the male organ, and the presentation of a magnetic force to the nervous termini, produce no sensibility whatever. They seem to shrink from it.

Married or single women awaken from these dreams with a sense of weakness they are often unable to account for. They do not suspect for a moment the true cause. General want of energy, in both mind and body, and sometimes back-ache, weakness of the limbs, faintness, and entire want of appetite, are experienced in the morning, especially when one of these dreams has taken place during the preceding night.

Masturbation is not in all cases the cause of these debilitating dreams; sexual isolation, diseased wombs, ovaries, etc., many times induce this morbid condition of the amative organs; but whatever the cause, the disastrous effects are the same, and no woman, young or old, should allow these dreams to occur without making thorough

effort for their cure. Some have them once a month, oth[illegible] either the oftener. I have had cases wherein they occurred every nigh[illegible]ian to frequency is frightful. Once a week is sufficient to overuses named strongest constitution in a few years. For their cure I havion to the electrical applications very efficient; but for those at a distprescribe for such as prefer to consult me by letter, I prescribe such treat cause as I allude to on page 299. It is necessary, the same as in thederange- ment of nymphomania, to equalize the nervous circulation, a depend- restore those nerves centering in the sexual organs to their napathy, condition, and the treatment referred to seems sufficient to e this result. As these are not new cases in my practice, no per affected should hesitate through feelings of false delicacy to presc her case for advice. Consultations in person or by letter, are strict confidential. his to r

Anthropophobia and Sexual Apathy.

These are the very antipodes of nymphomania. The first causes repugnance to, or dread of coition; and the other a perfect disinclination for the act. These are much more prevalent diseases than nymphomania. I term them diseases because they are manifestly entitled to this classification. All perfectly formed females, if their organs of amativeness are properly active, and their sexual organs in a normal condition, are susceptible to amative desires and emotions, and pleasurable sexual excitation. Inasmuch as the size of the organ of amativeness varies in different females, of course this susceptibility varies in a corresponding degree; but when repugnance or total indifference exists, one of the faculties which God designedly implanted in women, is paralyzed, as much as the arm is paralyzed if it is deprived of sensation and motion.

It is not, however, my design to treat of these diseases here. I choose to reserve a further consideration of them to an essay in Part IV., to which the interested reader is referred. I merely desire to name them in this connection, because I regard sexual repugnance and indifference as diseases of so prevalent a nature as to deserve mention in this chapter on chronic diseases of the female organs of procreation.

Sexual Dyspepsia.

Probably this is the first time the term dyspepsia has been applied to any other affection than that of the stomach when digestion is in

aterfered with; but there is an affection to which some omen are subject, presenting, mentally, all the symptoms ia when the stomach is free from disease, and the digestion active, or entirely so. As it proceeds from derangements native and procreative organs, I shall denominate it "sexual ia." The affection is unlike anthropophobia, because this acterized by dislike of men, and decided aversion to sexual ourse. It is unlike sexual apathy, for this simply consists of ity to enjoy the sexual embrace. In sexual dyspepsia there is a morbid desire for coition, just as in some cases of stomach epsia, there is a voracious appetite for food with no capacity to est it. Intercourse in this case makes the female irritable, dis-isfied, and wretched. She may momentarily experience pleasure, cally, and then all at once every particle of sensation flies away, nd at the close of the act, she finds herself exhausted, disappointed, and annoyed by the fluctuating moods which she experienced during its continuance, and in a condition of mind, for days afterward, which renders her peevish, irritable, whimsical, and discontented. Even when sexual desire is moderate, and coition is attended with variable sensibility and final disappointment, the result upon the mind is just about the same as I have described when a morbid desire exists. Indeed, the mind, in these cases, exhibits all the varying and inconsistent moods peculiar to one affected with confirmed dyspepsia of the stomach. Every movement and motive of the husband is misinterpreted; and if the affected wife be of a jealous disposition, the atmosphere of the house is loaded with vapors of restlessness which settle down upon the innocent heads and hearts of every inmate like soot from a smoky kerosene lamp. The magnetic atmosphere is thick, stifling, and poisonous, completely destroying social enjoyment. There is, indeed, no restful happiness for any one under the same roof; and the worried, half-crazed husband runs his hands through his hair; presses his temples; lays hold of his boots, and reaches out to touch other things mundane to satisfy himself that he has not "waked up" in Hades.

The immediate causes of sexual dyspepsia are various. It may arise from marriage of convenience rather than of affection; from displacements of the uterus; from vaginal irritations, or uterine congestions; from too great similarity of temperaments; from local inadaptation; and from a capricious disposition, or ever-changing

temper, on the part of the wife. When it proceeds from either the first or last mentioned cause, it is not in the power of a physician to remedy the evil; but when it arises from any of the causes named intermediately, a medical man who has given proper attention to the treatment of affections of the sexual organs, may usually prescribe successfully for its removal. It will be noticed that the first cause referred to, as well as the last, is not dependent upon physical derangements, while the other causes, with two exceptions, are so dependent. Any one affected with sexual dyspepsia, or with sexual apathy, or anthropophobia, is at liberty to consult the author.

Ovarian Diseases.

The consideration of these diseases might properly find place in this chapter, but as I shall have to go over the same ground when I come to treat upon barrenness, space will be saved here by referring the reader directly to the chapter "Hints to the Childless." The subject of barrenness itself, the reader may think, properly belongs to this chapter, but on perusing that, it will be found that barrenness is not alone peculiar to women, and as I have considerable to say in regard to sterility and its cure, I prefer to place the suggestions I have to offer under that head, in a chapter by themselves.

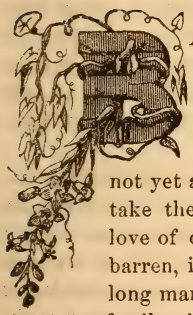
Treatment of Diseases referred to in this Chapter.—More or less has already been said, under each head, of the treatment best adapted to these affections, but a few words more may be properly added. It is quite too commonly the custom of physicians to depend entirely upon the application of caustic, or to injections, or to something else which simply affects the part immediately diseased. The result is, that any encouragement which the patient receives through temporary benefit is followed by discouragement in consequence of ultimate failure; and there are thousands of women to-day suffering with uterine derangements who really believe that there is no help for them. There are even some physicians who have been led by their poor success in these cases, to pronounce them incurable. Now I am confident that all this discouragement on the part of the patient, and all this failure on the part of the physician, is mainly, if not entirely, due to the fact that those constitutional derangements which either preceded the local difficulty, or became complications after the local difficulty had made its appearance, are over-

looked. In my practice I have generally found myself able to permanently cure these supposed incurable cases. I first satisfy my mind regarding the constitutional complications which co-exist, and give especial attention to them at the same time I am treating the local difficulties. What I have in various parts of the foregoing essays denominated immediate, intermediate, exciting, or provoking causes of uterine derangements, may be properly termed sub-causes. The vascular or nervous system, or both of these systems, must have been antecedently deranged, to allow the sub-causes to which I have alluded, to fasten chronic affections upon these organs, unless they were directly caused by mechanical injuries, abortions, or venereal contagion; and even in these cases, the blood and nervous system become involved, and then react upon the local diseases, so that perfect recovery in all cases depends upon the comprehensive treatment I have named.

Electricity, properly applied or administered, has remarkable curative powers in all cases of uterine affections, and since the invention of my Magnetic-stool, I believe the most hopeless cases can usually be cured. No future invention in this age of ingenuity, it seems to me, can be better adapted to the treatment of female complaints, for it enables the operator to give the most thorough application without the least discomfort to, or indelicate exposure of, the patient's person. Indeed, it carries the gentle electrical current to the parts most affected without any direct agency of the physician, nor does any thing which has been used by one patient come in personal contact with another, excepting such parts as can be seen to have passed through the hands of a laundress, thus rendering the operation comfortable, free from embarrassment on the part of the patient, and what is still more important, free from the possibility of imparting to one the poisonous infection of another. In those cases which can be placed under my personal treatment, the applications of electricity through my Magnetic-stool will prove a valuable auxiliary. Those suffering with uterine difficulties, who reside at a distance, and cannot visit me, are referred to pages 299 and 583.

CHAPTER IX.

HINTS TO THE CHILDLESS.



BARRENNESS is a word which designates a physical condition abhorrent to every one in married life, who has not already become a parent. The exceptions to this rule are only those who have but recently entered matrimony, or such as have not yet acquired means sufficient to enable them to undertake the expense of rearing a young family. Whether love of children is limited or universal, the idea of being barren, is one from which every individual who has been long married, and has not at least one child to enliven the family circle, instinctively recoils. Such a condition has in all nature but one parallel, and that, the great desert which spreads its vast expanse wearily before the eye without a blade of grass, leaf, twig, or tree to nod a welcome to the passing breeze, nor the first crystal of water to reflect in prismatic colors the golden rays of the sun. With many females, the grave is more cheerfully looked forward to than childless longevity, and not a few husbands would rather die in the prime of manhood, leaving an heir, than to live to gray old age and be esteemed incapable of reproduction. The careless world cannot know the secret yearnings of the hearts of such unfortunate persons so well as the physician; nor is the family doctor so liable to find them out as one engaged in a national practice like myself. A majority of childless married people will strive to make their neighbors think they cannot endure children, while the physician in whom they have confidence, living ten, twenty, or a thousand miles off, is intrusted with the secret of their hearts' desire. Now, I am betraying the confidence of no one in making these general remarks. I never breathe the professional secrets intrusted to my keeping, nor would I make these general allusions to them, except

for the fact that those of my readers with a houseful of babies might feel surprised to find space, however limited, devoted to the subject of barrenness.

A wife who has had four or five children, generally wishes herself barren, feeling that she has done her share toward populating the world, and she is entirely unfitted by her fruitfulness, to sympathize with one, who, loving children, has none of her own to love. But, taking a serious view of the matter, however badly children may sometimes turn out, childless old age is a dismal future for the mind to dwell upon, and, having reached it, the present is no less cheerless. The hearthstone of a married pair, in the vigor of life, is electrified with the presence of the bright roguish eyes which mischievously watch the smiles and frowns of approving and reproving papas and mammas, while no vernacular is so enchanting as the hesitating and rambling utterances of "our baby" when it first begins to kill the king's English. The new father seems more dignified, and stands several inches higher in his stockings, while the mother is never tired of relating the extraordinary feats and accomplishments, or quoting the wise remarks of her prodigy. Passing the meridian of life, doting parents watch with pride the developing genius of a promising son, or the unfolding brilliancy, beauty, or goodness of a favorite daughter, while the infirmities of old age are deprived of their depressing influences by the affectionate attentions of grateful children. Therefore the desire for children is natural, and all honorable means to obtain them excusable. A woman who is devotedly attached to them cannot imagine how far she might go in her attempts to become a mother, unless placed right in the position of one who has spent many years of married life without a sign of pregnancy.

The female members of the human family very early give evidence of their love of children. A little girl who knows nothing of the process of obtaining a living child, nor possesses sufficient physical development to produce one, evinces her love of offspring by making rag babies, and dressing and caressing the dolls which are purchased for her at the store. As she becomes older, she loses attraction for this imitation of the real article, and loves to attend a live baby. A noble woman has said: "Motherhood is the ideal state of womanhood to every woman not arrived there. * * * Woman must yearn for motherhood because she is woman."

The long and short of the matter is, no woman, in the secret recesses

of her own heart, will felicitate herself with the reflection that she is physically incapacitated to bear a child. You who read this, and who, in middle or advanced age are without children, will whisper to yourselves—"*This is true.*" Aside from the incentive to child-bearing, which proceeds directly from the love of children on the part of woman, the wife naturally fears that she will lose the affection of the husband if, after many years of marriage, there is no issue; nor is this fear without foundation, for instances are not wanting wherein separations have occurred simply on this account. Napoleon and his Josephine present a notorious example of this kind, and probably every reader will remember some such case coming under his or her immediate observation. At least, I am confident, every physician in large practice has personally known of one or more such cases.

Considering, then, the importance of the subject, do not require me to go around that information which may be most useful to you, for the purpose of employing words and illustrations which cannot possibly offend the false modesty of some who are unwilling to take a sensible view of any thing relating to the organs of procreation. These pages have been written for the childless by one who has given much attention to what is popularly called barrenness; but those belonging to this unfortunate class, who are at all given to prudery, should avoid even a cursory perusal of the matter presented herein. Our Creator has as yet, so far as the writer's observation extends, provided only one process for procreation. That process may be varied to meet the necessities of various cases; but in some way or other the germ generated in what is called the testicles of man, must be brought in contact, in the womb, with the germ generated in one of the ovaries of woman. We who call ourselves human beings, properly belong to the animal kingdom, and must consequently be governed by the laws which govern animal life and its perpetuation. However sexual intercourse may be regarded as an act indulged in for merely sexual gratification, for the single high purpose of reproduction, it should be considered not only free from vulgar criticism, but as one divinely chaste, and, indeed, indispensable, unless we can all adopt Shaker philosophy and theology. In fact, it is not participation in this peculiar physical contact for the main purpose of reproduction, that has led the whole affair to be privately esteemed attractive and unavoidable, and to be publicly

considered disgusting; but rather excessive copulation for the mere sexual pleasure it affords. A man who gluts his stomach with rich viands and libations from his breakfast hour until bed-time, ultimately becomes dyspeptic, and when his appetite has become cloyed, and his stomach painfully sensitive, he regards nearly all food as disgusting and nauseating. Forgetful of his former habits, he is surprised at the gluttony of his more fortunate neighbors who have not yet reached the stage of diseased stomach, and he thinks the world is made up of despicable gourmands. Now, a large majority of men and women are sexual dyspeptics. In other words, they and their ancestors have drank so deeply and so unnaturally from the cup of sexual pleasure, that the act by which God designed mankind to perpetuate itself, and the organs which he gave to perform the function of procreation, are looked upon as not only inherently disgusting, but beneath the worthy attention of Christianized people. Sexual connection may be indulged in as an animal necessity in the privacy of the bedchamber, or even in the abode of the harlot; but a treatise upon these organs and the most effectual plans for securing fruitfulness to those who have been denied the pleasures of maternity and paternity, may not unlikely be regarded as impure, obscene, and unfit for perusal. My idea is simply this: That sexual intercourse for merely sensual pleasure when true affection is absent, may not be morally or religiously elevating; for the purpose of procreation, it is neither socially, morally, nor religiously debasing, but rather obedience to a divine mandate. It *may* be entirely right, and in harmony with the design of the Almighty, that men and women should cohabit to a moderate extent for pleasure only. There are those who question this. It is, *certainly*, in harmony with the design of our Creator that cohabitation should take place between the sexes for perpetuating our species. This cannot be questioned by a reasonable person who has not a Shaker cavity in his brain. The reproductive organs then, instead of being morally neglected and treated as too vulgar for our consideration, should be regarded as the most valuable of all our organs, and the most worthy of our care, so that they may be employed, at least, for the most important object of their creation. The stomach digests the food which supports life; the organs of the brain give rise to various thoughts, feelings, and emotions; our eyes enable us to see objects beautiful, or disagreeable about us; our ears to hear sweet sounds or grating discord; our

noses to smell delightful odors or disgusting fumes; and all the other organs of the human body, excepting the reproductive, minister simply to the being who now lives; but none of them possesses the mysterious power of a creator; none can reproduce themselves; and, excepting for the procreative organs, all those I have named would cease to exist in a little time. When we consider this fact, it is hardly strange that the people of the pagan world worship images fashioned like the procreative organs of both sexes; but it is strange that any process of refinement, or any school of civilization should have been able to lead the human family to be ashamed of them. It has been said very truly, that "many people are ashamed that they have bodies;" and it may be still further said that nearly all are ashamed of the most complex and wonderful of all the organs of those bodies. If, as a large share of the human family believe, this false sentiment is the result of sin—if the fall of man led him to envelop himself in fig-leaves, it seems to me that we had better all get up as soon as we can, and comport ourselves as obedient children of our common Father. The child may be to blame for falling, but there is not a particle of excuse for his not making an effort to regain his feet.

Let it be understood that this chapter is intended for sensible people—for those who can look beyond the prudery of Mrs. Grundy, and appreciate the true uses of things—for true men and women who are disposed to take a scientific view of important matters, however delicate, without a too sensitive regard to the conventional prejudices to which civilization in its infancy has given rise; in brief, for those who possess all the foregoing qualities, with a laudable desire to be happy fathers and mothers.

The Causes of Barrenness.

I do not propose in this chapter to treat upon every possible cause, but rather to confine myself to those causes which may in some way or other be overcome. Those causes which may be put down as irremediable in any way whatever, are those arising from some congenital malformations of the organs of procreation which are sometimes met with, or some organic destruction of the completeness of the procreative system by disease, accident, or surgical operation. Among the former may be mentioned deformities of the vagina,

womb, fallopian tubes, and ovaries of the female; or testicles, spermatic tubes, or penis of the male. Among the latter may be named strictures of the womb of an obstinate character, caused by inflammation or ulceration of the cavity, stricture of the fallopian tubes, misplacement of the fimbriated extremities of the fallopian tubes, permanent adhesions of the fimbria to the ovaries, and a partial destruction of the ovaries of the female; and of the male, the removal of the testicles by disease or the surgeon's knife, their partial destruction by self-pollution and sexual excesses, the permanent consolidation or obstruction of the tubes carrying the semen from the testicles to the seminal vessels, and such a permanent obstruction of the canal of the urethra as to resist the propelling force of the ejaculatory ducts, causing the seminal fluids to be emptied into the bladder.

Those which may be regarded as common, and which may be obviated by some means, may be classified in the order of their frequency, as follows—*First:* local inadaptation. *Second:* diseased condition of the wife. *Third:* diseased condition of the husband. *Fourth;* excessive amativeness. *Fifth:* temperamental inadaptation.

Local Inadaptation.

This is pretty faithfully represented in all its varied phases in figures 127 and 128, which I have had designed and engraved expressly to illustrate this essay. No attempt has been made at anatomical accuracy in giving the form of either the male or the female organs. The obvious reason for this, is to avoid unnecessary offence to what is popularly regarded as refined taste.

I am more and more convinced, every year of my practice, that local inadaptation is the commonest cause of barrenness. While it is true that some women are so susceptible to impregnation that they will conceive if the seminal fluids be but deposited within the lips of the vagina, whatever may be the position of the womb, there are very many who cannot, unless the local adaptation is so perfect as to cause the fluids of the male to be poured directly into or upon the mouth of the womb. In an excited state of the healthy uterus, the mouth draws toward itself and sucks up at least a portion of the male fluids, if deposited near it; but this absorbing or suction power differs to a remarkable degree in women,—so much so, indeed, that in some who greatly enjoy the copulative act, it is feeble, and

the susceptibility to impregnation slight; while in others, who enjoy the embrace but little, or possibly not at all, it is so powerful as to take up fluids deposited in any part of the vagina. It has been, and is now, supposed by many, that the female cannot become pregnant unless she enjoys coition. Even physicians entertain and publish this fallacy. It is a great error, for while the clitoris and erectile tissue which, by excitation, usually give pleasurable sensations, may be nearly or quite paralyzed, so that the wife is indifferent, or, perhaps, opposed to intercourse, the mouth of the womb may be active, and the ovaries, where the ova or eggs are formed, fully capable of performing their functions, so that conception will result. I have met many such cases, and have been called to explain the reason in hundreds of them. The fact is, many women will conceive by simply the injection of the male fluids into the vagina, or even the deposit of a drop of them on the lips of the vagina, when they are not under a particle of amative excitement. On the other hand, a woman may be excessively excitable, amatively, and keenly relish the embrace, when she is not susceptible to impregnation. One reason for this is, that while the clitoris and erectile tissue may be full of animation and susceptibility, the mouth of the womb may act sluggishly, and in some cases, the ovaries in addition, may be at fault. Another reason will be presented before the conclusion of this chapter.

Notwithstanding the two prominent peculiarities I have just instanced, it is nevertheless true, as a general rule, that amative excitement and enjoyment of the act of coition in most women, render impregnation more certain; and, considering the prevalence of sluggish wombs, local adaptation is very desirable, and often indispensably necessary when children are wanted. Unless the womb be active, as the male organ relaxes from its distended dimensions, or is withdrawn after the expenditure of the semen, the folds of the vagina in closing together press out the seed of the male, and the childless wife at the close of each intercourse meets with the disappointment of finding the impregnating fluid upon her clothing, until by its continued frequency she ceases to expect any thing better, and despairingly gives up her fondest hope of becoming a mother.

The reader should carefully examine the annexed illustrations in the light of the foregoing explanations, and it will then be easily understood how a great many wives may be childless simply because of the failure of the male fluids to reach the mouth of a sluggish

womb. In these illustrations of local inadaptations, I embrace displacements of the uterus. These are common; more common than is generally supposed, for the reason that it is popularly believed that displacements do not exist in healthy women. It is generally thought that only those have displacements who are affected more or less with discomfort in the pelvic region. They are generally associated with such symptoms as leucorrhœa, dragging or bearing-down feelings in the region of the uterus, and the various other symptoms described as occurring in these cases in the preceding chapter; but it should be understood that they are often produced in

Fig. 127.

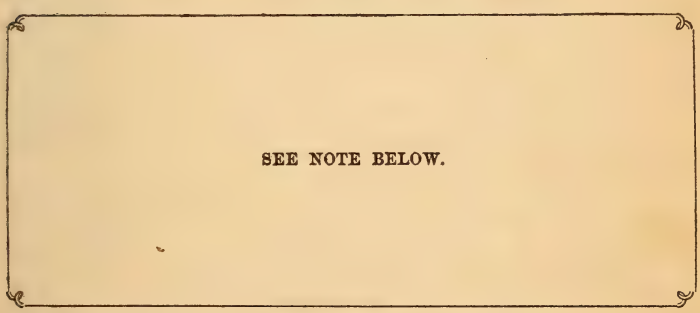
LOCAL INADAPTATION.

Note.—As the illustrations originally designed for this place, can only be of interest to those who are barren, and to medical men, it has been thought best, after reflection, to omit them, and then supply them by mail in letter envelope without charge, to those who may be individually or professionally benefited by their possession. The author's address is given on page 910.

young girlhood so gradually, that nature meekly conforms to the changed positon of the womb. When brought about by any pressure of the bowels downward, the womb usually takes the position represented in the diagram marked I; or, when by contracting the cavity which it should occupy, the displacement represented by K. In far the greater number of apparently healthy cases I have examined, however, the diagram designated by the letter I, best represents the displacement. It seems almost impossible that such a position should not in all cases affect the proper action of the bladder; but

it does not perceptibly in many, for I have discovered it in women who suffer no inconvenience whatever from an inability to retain the water, nor yet from any sensation of dragging, bearing down, or weight in the region of the womb. Besides the early effects of bad habits in dress, falls, severe jarring of the body, and diseases in girlhood cause displacements of various kinds, which, not remedied, in adult age continue without the usual painful symptoms. Nature, having become accustomed to the changed position, performs all her functions faithfully excepting that important one—reproduction, and for the purpose of this, all that is necessary is to introduce the

Fig. 128.



LOCAL INADAPTATION.

Note.—With the greatest effort on the part of the author and engraver, it has been found difficult to present these illustrations in a way to avoid offence to those who are not individually or professionally interested. The course suggested in the *Note* on the opposite page has therefore been chosen, and they will be supplied to the barren or to physicians free of charge.

fecundating fluid of the male into the uterus, or bring it in direct contact with the mouth of the womb.

I trust the reader will bear patiently with me while I enter into an extended explanation of the diagrams. Let us look them over carefully together, for local inadaptation should be carefully studied by the childless. It is, as I have already said, not only the most common cause of unfruitfulness, but also one which is the most easily remedied without the aid of a skillful physician experienced in the treatment of sterility.

A, represents the womb in the right position, but the organ of the male is some seven or eight inches long, and, therefore, passes the mouth of the womb. Although the average length of the male organ is six inches, in many cases it is seven, and in some, as long as eight or nine inches, while in a few, and I might say extraordinary ones, its length is greater than I have mentioned. Practically, this inadaptation amounts to the same as that represented in the next illustration. The mouth of the womb must be active, or the impregnating fluid of the male will pass out of the vaginal cavity without causing pregnancy.

B, represents the womb as being located too low in the vaginal cavity, so that the glans-penis of an organ of average length is imbedded in the loose bagging folds of the vagina above the mouth of the womb, and there, away from the entrance of the uterus, the seed of the male is deposited. As it falls outwardly, unless the mouth of the womb is very active, it passes this orifice and finds its way out of the vagina, not a drop being retained for fecundation. This position is not uncommon.

C, represents the reverse of A. Here the female organ is well formed, but the male organ is only three or four inches in length, and consequently barely passes the external and internal lips of the vagina, leaving a distance of two or three inches between the glans-penis and the mouth of the womb. Now, here, we see quite a disparity, and especially so when it is borne in mind that if the penis be even one inch too short, and deficient in ejecting force, the impregnating fluid may fail to reach the womb unless the mouth of the latter has active absorbing power. The force with which the semen is ejected from the male, greatly varies in different persons, so that, if one having but little of this force and a short penis, is united to a female having the womb in the right place, but deficient in suction power, pregnancy will not be likely to take place, however fruitful the female may be in the production of healthy ova, or the male in secreting vital semen.

D, gives a view of quite a different position of things. Here the male organ possesses the average length, but the uterus is located too far up in the vaginal cavity. The vaginal canal is really quite too long. The distance from the outer surface of the external lips of the vagina to the mouth of the womb should not exceed five or six inches. Here the distance may be supposed to embrace eight inches,

leaving a penis of six inches in length, two inches from the mouth of the womb; and one of three or four inches, as in C, hardly half way up the vaginal cavity. If a woman of this procreative organization be the wife of one having a short penis, all must depend upon extreme susceptibility to impregnation on the part of the former, for the ejaculatory force of the seminal expenditure could hardly be sufficient to reach the mouth of the womb, if the male organ is of the usual length as represented in D. With two inches space between it and the uterus, deficiency of suction power on the part of the latter and of ejaculatory force on the part of the former, intercourse would prove fruitless.

E, represents the womb in the true position; but there is a downward curvature of the male organ, so that it not only does not reach the mouth of the womb, but it pours the fecundating fluid upon the back wall of the vagina, from which position it may pass out without coming in contact with the mouth of the womb. I have known cases of married people who were liable to excessive childbearing, in which the husband successfully resorted to this position in the vagina at the moment of the seminal expenditure, for the purpose of preventing conception. The only reason it may not be considered a reliable prevention, is because of the great suction power of the uterus in many women; but in those I refer to it was a success, and they only bore children when they desired to.

F, represents another malformation of the penis. Here the organ has a side curvature, and points to one side of the walls of the vagina. The deposit of the seminal fluids in this place at each intercourse, is sufficient in some cases to render the married pair childless.

G, represents the neck of the womb twisted so that it will not face the glans-penis in the sexual act. This malformation is not unfrequently met with. I have examined many cases in which it was long, slim, and contracted, pointing, in some, to the side; in others, upward or downward. In one case that I examined, the neck of the womb was two inches long, no larger than a goose-quill, and as pointed as a pencil. The suction power in such a womb is never more than moderate.

H, exhibits the glans-penis with a similar deformity. This one is twisted sideways. In some cases the glans is bent downward, and in others, upward. I have never yet in my practice met with a pair in which the wife had the malformation of G, and the husband that

of H. If there are two such unfortunates, offspring cannot reasonably be looked for until my remarks on remedies are read, and the difficulty mechanically removed. When one has such a deformity, it is enough to cause the absence of offspring. We will now turn to Fig. 128, and continue this investigation.

I, presents the top of the womb fallen forward, causing the mouth to rest against the back walls of the vagina. So imbedded is the neck of the uterus in the membrane lining the vaginal cavity in some cases of this kind, no other than mechanical means can possibly rescue a female from barrenness. When it simply rests against the back wall, without pressure, the penis passes above it and pregnancy may not result.

J, represents the opposite position, the mouth of the womb pressing against the front wall, dividing the vagina from the bladder, in which case the penis passes under the mouth of the womb, and to the side of it. When the womb occupies this position, or the one shown in I, its mouth is as completely covered as if the finger were placed over it. To these two positions may be attributed the most common causes of barrenness presented under the head of local inadaptation, although the inadaptations represented in A and B, occur nearly as frequently.

K, presents a position not very dissimilar to that given in J. The difference is, that the uterus has fallen downward as well as backward. There are also downward and forward displacements, as when the womb occupies the low position represented in K, with its top against the bladder, and its mouth against the rectum. In these displacements the penis presses against one side of the womb, and in most cases is not allowed to enter far into the vagina. When, however, the male organ is short, this position of the womb occasions no inconvenience in coition. If the male organ is long, it does.

L, represents the uterus in its right place, and the penis also; but the glans-penis is covered with the foreskin, which will not yield and press backward, but closely envelops the glans, and projects beyond it. This is technically called phimosis, and unless the orifice of the foreskin is on a direct line with the glans, the seminal fluids may be misdirected, and their ejaculatory force impeded.

M, gives something of an idea of the position of the womb when it is doubled upon itself. In this diagram the engraver has not been entirely successful in presenting the doubled position of the neck, or

the obliterated condition of the cavity. It is often much more doubled upon itself than the diagram represents. In a case of this kind, the male organ has no difficulty in coming in contact with the mouth of the uterus; but the canal leading up through the neck to the cavity of the womb is nearly, or quite closed up by its cramped position. In this position the mouth usually has but little suction power, and sometimes none at all. When the suction power is sufficient, the compressed condition of the canal may obstruct the passage of the spermatozoa, and thus prevent the possibility of conception.

N, presents an irregular, contracted vagina, preventing the entrance of an ordinary sized penis to a sufficient depth to meet the mouth of the womb. The womb itself is in a good position, and in its right place; but it is practically blockaded. While many of these contractions are congenital and incurable, some are produced by disease, and may be remedied. When congenital, the skillful knife of the surgeon may sometimes obviate the difficulty.

O, represents a similar inadaptation arising, not from contraction of the vagina, but from the unusual size of the male organ. When the diameter of the penis much exceeds two inches, it is apt to prove a troublesome member. I was recently consulted in a case where the circumference was seven inches, and the length eight inches, and the vagina of the wife had not yet been able to admit it. If the mouth of the womb is very active, this inadaptation may not prevent pregnancy; but if it is sluggish, some means recommended in the remarks on remedies should be adopted.

P, presents the womb in its proper position, and the glans-penis near its mouth, but the natural outlet of the urethra of the male has been closed by disease, considerably scarifying the glans, and the orifice through which the seminal fluids are discharged is over, or in more cases, underneath the glans-penis, and a little below it. In such a case the glans may be so pressed against the mouth of the womb as to absolutely obstruct the orifice when the seminal fluids are discharged in an upward or downward direction. In such a case, the suction power of the uterus might be vigorous, and the end of the penis so block the passage into the uterus that pregnancy would not take place. If the mouth of the womb be inactive in such a case, conception would be almost, if not absolutely impossible, excepting with the adoption of some means recommended for overcoming local inadaptation, given in another place.

Considering how blindly people come together in marriage, it is not at all surprising that local inadaptation often takes place. In just what manner, consistent with the safety of our system of society, the liability to mistakes of this kind may be obviated is difficult even for the physiologist to suggest. Even when a person selects a companion with the strictest view to a union founded upon affection only, the choice may prove a partial failure. A man may enter a clothing store and select a garment which exactly suits his idea in quality and style, but when it is sent home, if he has not tried it, he may find that it pinches in the arms; draws too tight in the back; or is too long, or too short-waisted. A young woman may select at the shoe store a pair of gaiters which in her opinion will prove "just the thing," when, upon trying them on, they pinch the toes, or the instep, or in some other way fail to make the feet comfortable. So here is a question for physiologists and moralists to settle. How shall all liability to local inadaptation be avoided?

Let me strongly urge upon all who are childless to sufficiently acquaint themselves with their organs of reproduction, and the position which they occupy in the act of copulation, to determine if possible for themselves, whether local inadaptation may not be the real cause of their barrenness. By carefully examining the names, locations, and descriptions of the organs as presented in "Private Words for Women," and as will be presented in "Private Words for Men," it seems to me all may be able to do so without any direct aid from the physician.

Diseased Condition of the Wife.

Falling of the womb is a very frequent cause of barrenness. I have already explained in what I have said regarding local inadaptation, how this affection may prevent pregnancy; and I have here only to remark that while displacements very often exist without any signs of disease, the world is full of sufferers from painful displacements of the womb. When the painful symptoms are present, pregnancy is less liable to occur than when these symptoms are absent, because their presence shows that the womb is not only out of its natural position, but that it is congested, inflamed, and debilitated, and all of its appendages with it. The whole muscular structure of the procreative apparatus is relaxed, and every organ involved; intercourse

is more or less painful, the mouth of the womb is sluggish and often congested, and sometimes sensitive to pressure. Its orifice is nearly or quite closed up by inflammation; or is opened and so nearly paralyzed as to be unable to receive or retain the impregnating fluid. Impregnation may be effected in some cases by means which I shall advise where simply local inadaptation exists; but in a majority of them, the womb is too much diseased to perform its most important function successfully. Even if impregnation is effected, an early miscarriage may occur; for, if the womb is inflamed and swollen, it will not expand to make room for the growing fœtus; if relaxed, it does not possess sufficient strength or contractile power at its mouth to retain, for the natural period of gestation, its precious fruit.

In some cases, when the womb is really in its right position, and all the organs of generation are in a sound state, the cavity of the womb may be closed by inflammation. In others, the lining of the cavity may be so affected by inflammation that it will peel off, either in a body, or in strips or shreds, so that when conception does take place, if conception be possible, the infant fœtus, with its placenta, is carried away sooner or later, by this shedding of the lining of the womb's cavity. In some cases of this kind which have come under my observation, conception would take place and pregnancy continue to the second, third, and in some instances, to the fourth month, and then all would be detached and pass off in a shapeless mass, or else in fragments. Ulceration in the lining of the cavity may exist, and poison or destroy the life of the spermatozoa, and thus prevent conception.

It is sometimes found that a body of coagulated albumen blocks up the canal leading from the mouth of the uterus to the cavity, so that the spermatozoa can neither pass through it, nor between it and the walls of the canal. It should be understood that there are glands in the uterus which secrete albumen for the purpose of lubricating the parts and facilitating the passage of the child in confinement. These glands are usually active in sexual intercourse, and somewhat so in menstruation; but when this albumen possesses unnatural properties, especially glutinous, it may obstruct the passage as I have explained, and although the obstruction may be swept out by the menstrual blood each month, such may be the condition of the glands that another plug will almost instantly form, allowing no opportunity for the spermatozoa to ascend the canal. Chronic irritation or inflam-

mation may cause a puffiness of the lining of the neck of the womb so as to effect the same result. Stricture of the neck of the womb may also prevent the spermatozoa from entering the cavity. Chronic irritation may not only exist in the lining of the neck, but also up through the cavity just sufficient to produce a high degree of sensitiveness, such as sometimes exists in the lining of the stomach. When this condition prevails, the presence of the seed of the male in the womb causes contractions either at the time it is received or not many days after, and it is thrown off just as food is thrown from the stomach by vomiting when this kind of irritation exists in the stomach.

Ovarian affections are often the cause of barrenness. It must be remembered that the ovaries in health are the organs which produce the ova or eggs of the female. They are to the female what the testicles are to the male. In them is produced the little germ which, united with the male germ, forms the fœtus. Fœtus is a name given to the child in the first stages of its utero life.

The ovaries are subject to many affections which might be properly stated as inflammatory, ulcerous, cancerous, tumorous, dropsical, and paralytic. Fig. 129, represents an ovary affected with cysts, or abnormal formations of the ova or eggs. The letters *b* represent these cysts. The female affected with an ovarian disease of this character may be compared to a tree that puts forth sickly blossoms, followed by fungi or blasted imitations of fruit which fall to the ground without ever reaching maturity. Such trees are often seen, which, however beautiful to look upon, produce nothing but fibrous, shapeless fungi, which could hardly be called imitations of fruit. An ovum such as that shown in *b*, if impregnated by a healthy spermatozoon, does not possess sufficient vitality in most cases to remain ten days in the uterus; and, if it remains for a few months, it usually amounts to nothing

Fig. 129.

DISEASED OVARY.

more in the end, than what is commonly called a false conception. In other words the female may be delivered in three or four months' time of a shapeless mass which bears no resemblance whatever to a fœtus. Fig. 130, represents a healthy ovary wherein the ova or eggs are represented like the one bearing the letter *a*. Those lighter, irregular spots marked *b*, exhibit follicles which have discharged matured ova. An inflammatory, ulcerous, or tumorous condition of the ovaries, may destroy the vitality of the ova.

Ovarian affections, unless of a paralytic character, are attended with more or less pain in either side of the abdomen in the regions where the ovaries are located. Often distention and tenderness are experienced in these regions when inflammation is present. In the paralyzed state of the ovaries there is an entire want of action, and seldom any feeling of pain, soreness, or other symptoms to indicate the existence of the trouble, excepting barrenness. Every organ of the body requires the nervous or electrical stimulus to properly perform its function. The stomach will not digest food if the pneumogastric nerve conducting the nervous or electrical stimulus to that organ is severed; and when the nerves leading to the stomach are inactive, digestion becomes at least defective. Now the ovaries require the same stimulus, and unless they have it, either no eggs at all are produced, or any which may be generated are not sufficiently perfect to render impregnation possible.

Fig. 130.

THE OVARY IN HEALTH.

The thoroughly paralyzed ovary much resembles that of a female who has passed the age for child-bearing, as represented in Fig. 131. Partial paralysis of the ovaries may not at all interfere with the general health; and a person having these organs so affected may appear to be in the full enjoyment of health, not only to their neighbors, but to themselves; but child-bearing is impossible unless they are restored.

Affections of the ovaries are in most cases attended with more or less disturbance of the menstrual function. When the ovaries are nearly

or quite paralyzed, the menses are too slight. When inflammatory, ulcerous, or tumorous affections are present, the menses are too profuse; and sometimes fleshy substances or fibres pass with the menstrual discharges. When the ovaries are dropsical, the menstrual fluids are often found to be very watery, with a lightish appearance or yellowish color. Tumorous and dropsical ovaries in some cases, produce very great abnormal distention, so that the female is supposed to be pregnant by those not capable of judging. It is well in these affections that females so suffering are not liable to pregnancy, for they could hardly survive the period of gestation. Nor is it best that females should become pregnant until these difficulties are entirely eradicated, for pregnancy is possible when only a partial cure is effected. Both out of regard for the health of the offspring, and the greater safety of the mother, every vestige of tumor, or dropsy should be removed before conception is allowed to take place.

Fig. 131.

THE OVARY IN OLD AGE.

Diseased secretions of the vagina and womb frequently occasion barrenness. The most common difficulty which may be mentioned under this head, is leucorrhœa. I have spoken in a preceding chapter of the prevalence of this disease. In health there is only just sufficient mucus secreted in the vagina to produce an agreeable moisture without any discharge whatever. It has been discovered that the spermatozoa of the male will live for many days in the healthy secretions of the vagina, whereas their contact with the diseased secretions seems to prove almost immediate death to them. Some of these abnormal secretions simply lack a sufficiency of the natural properties belonging to them; others possess purulent and acrimonious properties, attended with more or less irritation or burning heat in the parts. It is not unfrequently found that unwholesome discharges proceed from ulcers in the vagina, or in the womb. Whatever may be the source or immediate cause of the discharges, it may be safely said that any departure from the natural properties of the healthy vaginal secretions, may occasion barrenness. Some childless wife will observe that she has these discharges just before and just after the menses, the very times when she would be likely otherwise

to conceive. Some women can only conceive within two or three days before, or within ten or fourteen days after menstruation. Suppose in a case of this kind, leucorrhœa sets in just previous to the menses, and reappears at the cessation of the menses, and continues for about a couple of weeks; if that leucorrhœa possesses acrimonious properties, there is hardly a shadow of a chance for a person thus affected to become pregnant. It is true that some women habitually affected with leucorrhœa raise large families. In these cases, either the secretions are not acrimonious or poisonous, or local adaptation is so complete that the spermatozoa enter the mouth of the womb at the moment they are discharged from the male organ so as not to come in contact at all with the fluids of the vagina.

The fallopian tubes, through which the ova descend to the cavity of the womb, are sometimes obstructed by inflammation, ulceration, gluey secretions, or strictures. Any one of these conditions of the ovarian tubes may exist without any perceptible effect upon the general health.

In persons of a scrofulous diathesis, the blood may be so greatly diseased that the productions of the ovaries lack vitality. This want of vitality may be sufficient to prevent conception altogether; or it may be sufficient to allow impregnation to take place, but not sufficient to withstand and prevent the menstrual flow; and, in some cases, it may even allow pregnancy to go on for a few months, but before the child can be fully developed, the fœtus dies and a miscarriage occurs. In those who are born there are all degrees of vital tenacity exhibited. Some perish in infancy, some in early childhood, some in youthhood, some in middle age, while a few live to ripe old age. Well, now, there are all degrees of vital tenacity in those inhabiting the wombs of pregnant women, and the vital tenacity of each fœtus depends upon the health of the parents, temperamental adaptation, and upon the circumstances under which conception has taken place.

An excess of flesh may occasion barrenness. Fatty matter may not only so envelop the ovaries as to interfere more or less with their functions, but it may so separate the ovaries from the fimbria, or extremities of the fallopian tubes as to prevent the egg from descending to the cavity of the uterus. In some cases, excessive flesh may so widen or distend the body in the region of these organs as to render the fallopian tubes too short to reach the ovaries. Any one can easily picture to herself how the distention of the body between the

hips may remove those little ovarian organs sufficiently far away from the extreme end of the fallopian tubes as to completely isolate them. When this state of things exists, the ova or eggs as they ripen, simply drop into the cavity of the abdomen, where they doubtless decay, and are removed by absorption, while the womb, vagina, and the whole procreative system appear to be in perfect health.

Impotency on the part of the wife may cause barrenness. This disease may exist in the erectile muscle and tissue of the female, as well as in those of the male, in which case there is too much of a flabbiness and relaxation of the procreative system to either take up the spermatozoa of the male, or to retain for impregnation the ovum of the female. In such cases, frequently there are no other symptoms except inability to enjoy the sexual act.

Tumors in the vagina, the rectum, the bladder, the neck of the womb, or the fallopian tubes, may be so located as to prevent the male germ from effecting a meeting with the ovum of the female. The presence of these tumors may always be detected either by external or internal examination.

Suppressed, irregular, painful, slight, or profuse, menstruation often seems to be the cause of barrenness, but all these menstrual derangements result from some affections already spoken of, and need not be recapitulated here.

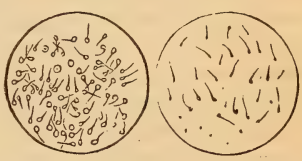
Diseased Condition of the Husband.

It seems seldom to be mistrusted that the husband is at fault in an unfruitful marriage. Besides the evidences revealed by the microscope, childless widowers have been known to marry the second or third time, and still died without ever having become fathers; while one of their wives, and possibly each of them, has been the mother of children by a former or subsequent husband. I believe all medical works use the word barrenness only in speaking of women who are incapable of reproduction, but this same term may be properly applied in reference to a husband who is unable to impart to the wife a healthy germ. The husband may be to all external appearances in a perfectly healthy condition. He may be capable of enjoying the sexual act to the fullest extent, and still be incapable of becoming a father. A wife is not unfrequently blamed by the husband and friends for not becoming a mother when she is not at

all at fault. All that she requires for becoming a parent is the introduction of a healthy spermatozoon into the vagina where it may come in contact with the mouth of the womb.

The most common cause of barrenness on the part of the male is debility of his procreative organs, and especially of the testicular glands, causing the production of non-vital semen. In Fig. 132, A represents a microscopical view of living and healthy spermatozoa; while B represents a similar view of sickly and inanimate spermatozoa, such as are often found in the seminal fluids of a barren man. Masturbation in boyhood, or excessive venery in boyhood or manhood, may so weaken the testicular glands as to cause this difficulty in the male. Mumps settling in the testicles may produce a similar result, while severe sickness of any kind may in some cases so affect the testicular glands as to vitiate their natural secretions. Mercurial salivation may so affect the testicular glands as to render the spermatozoa sickly, so that if they are capable of impregnating the ova, a diseased embryo is produced which will not tarry long in the uterus. When the system is affected with constitutional syphilis, the male germ may not be sufficiently healthy to produce a vigorous embryo. In some cases the syphilitic impurity will so far affect the spermatozoa as to render them incapable of impregnating the ova. It should be understood that the germ of the male as well as that of the female, may be affected by disease. The extent of that disease may widely vary in the spermatozoa of different men; and it may greatly vary in any one person at different times. In other words, a man who is usually sickly, or locally affected with disease, may have days or hours of convalescence when the spermatozoa generated at this particular time may possess all the vigor necessary for a successful impregnation, and the production of a healthy child. On the other hand, a man in perfect health in all his parts may have occasional seasons of debility in the procreative system, at which times the spermatozoa produced would either be incapable of impregnating a female, or of producing a healthy fœtus if impregnation did take place.

Fig. 132.



A, Microscopic view of healthy spermatozoa.
B, Microscopic view of sickly and inanimate spermatozoa found in the seminal fluids of a barren man.

Destitution of the spermatic fluids may render a man barren. Occasionally cases are met with in which the male is capable of coition, and even the enjoyment of the act, when no seminal fluids are emitted. In these cases, either the testicular glands, and the prostate and cowper's glands are literally dried up, or there is some obstruction to prevent their secretions from reaching the mouth of the urethra. In some cases there will be an emission of fluids from the prostate and cowper's glands, and, to the non-professional eye, these fluids may have all the appearance of natural semen, when they do not possess a particle of the germinal fluid from the testicular glands. In these cases, the prostate and cowper's glands are active, while the testicular glands are inactive, or are prevented in some way from communicating with the seminal vessels. By referring to the chapter entitled "Private Words for Men," the complexity of the procreative machinery of the male will be observed; and it will be seen how easily those small tubes called the *vasa deferentia*, which convey the secretions of the testicles by a circuitous route to the seminal vessels may be in some way obstructed. Their natural orifice is only sufficiently large to admit of a bristle, so that any affection of these tubes might easily shut off the contributions from the testicular glands, which contributions possess all that is actually vital in the semen.

A stricture of the urethra, as I have before remarked, may prevent the seminal fluids from passing it at the time of intercourse. In this case the semen passes back into the bladder, and escapes with the urine when that is voided. This may reasonably be expected, even in slight cases of stricture, in which the person has but little trouble in expelling the urine, because the act of voiding the water usually takes place when the penis is in repose, and not erected, and when elastic and flabby, the urine may pass quite easily, carrying with it the spermatic fluids which may have been emptied into the bladder, while the spermatic fluids could not pass in a state of erection because of the congested condition of the organ, and the consequent contraction of the canal of the urethra. Stricture cannot very well exist without the knowledge of the person so affected. If it does not so far obstruct the passage of the water in urinating, as to give some inconvenience, the stream flowing from it is divided as it leaves the orifice, or in some cases it may present a spiral motion as it flows out. As the symptoms attending stricture, as well as other

remarks upon this disease are presented in a previous chapter, it is unnecessary to dwell upon this difficulty here.

Chronic gonorrhœa or gleet may render a man barren; for if the spermatozoa are produced in perfect health in the testicles, their vitality will be affected or destroyed, as they pass through the urethra, by the acrimonious secretions of that canal.

Like leucorrhœa in the female, gleet or gonorrhœa is destructive of the spermatozoa. No one affected with this disease need be unconscious of its presence. There is, either at intervals or constantly, a passing out of diseased mucus; or if it does not run or drizzle away, it may be pressed out of the orifice of the urethra.

Catarrh of the bladder or of the urethra, may destroy the vitality of the seminal fluids and thereby render the male barren. In fact, any unwholesome secretions of the urethra or bladder, or any ulcerous matter habitually descending the canal of the urethra, may be sufficient to kill the seminal animalcule so as to render the husband incapable of effecting conception. As in gonorrhœa or gleet, these difficulties are attended with discharges from the urethra, so that no one can be unconscious of their existence.

The reader has in the foregoing paragraphs, the most common causes of barrenness in the male. Those difficulties proceeding from malformations of the penis have already been referred to in the essay on local inadaptation.

Excessive Amativeness.

This, on the part of either husband or wife, may be the cause of barrenness. If on the part of the former, he may be so excessive in intercourse as to hardly allow the spermatozoa to become sufficiently developed for impregnation; or he may be so violent in coition that at the very moment when the womb should be under the influence of its absorbing movements, it shrinks away and recoils from contact with the male organ. In the latter case, the wife may or may not enjoy the act of coition; but if she does, the womb at the climax involuntarily shrinks from the violent contusion which it is receiving.

When excessive excitability exists in the wife, the ova are sometimes actually ruptured by the violent contractions of the fallopian tubes, or paralyzed by the excess of nervous force or electricity present. The womb may also, under such excitability, be set into violent contortions and contractions sufficient not only to expel the ova out-

right, but to prevent the spermatozoa of the male from entering. In some cases of this kind there is no doubt but the ova are absolutely ejected from the womb with as much force as the spermatic fluids are ejected from the urethra, whereas the ova ought to be retained in the cavity of the uterus. However forcibly the ova may be taken from the ovarian glands and carried down through

Fig. 133.

TEMPERAMENTAL INADAPTATION.

A and B are supposed to represent one married pair, and C and D another married couple. The first two have light hair and eyes, and the second have black hair and eyes.

the fallopian tubes, they should not pass beyond the cavity of the womb, for conception never takes place in the vagina. In some cases where the procreative organs are excessively sluggish in their action, pregnancy has taken place in one of the fallopian tubes, much to the distress of the patient; but no one who is at all informed in regard to the organs of the female, need be assured that an ovum precipitated into the vagina could not become impregnated. Exces-

sive amative excitability is, therefore, more apt to cause barrenness than is sexual apathy.

Temperamental Inadaptation.

In my classification of the causes of barrenness, temperamental inadaptation came last. If I were treating upon ill-success in raising

Fig. 134.

TEMPERAMENTAL INADAPTATION.

E is the husband of F, and G husband of H. The first pair have hazel eyes and dark brown hair, and the second light hair and eyes.

a family of children, this cause would have been assigned the first place. What is temperamental inadaptation? It is the marriage of a man and woman who are too much alike in their physical structures and constituents. They may be as dissimilar as possible in their sentiments and tastes, but if they are not unlike in their constitutional formations and atomic ingredients, either entire barrenness or inability to have healthy, enduring offspring, will certainly ensue. Let me here group together a few people as we are too apt to

find them in married life. Just look for a moment at Figs. 133, 134. The adaptation is all wrong here, and must cause either entire barrenness or weak and short-lived progeny. If all were put into a bag and well shaken together they would probably come out better assorted than they are now. A could have healthy children if united with D or with H. C would be successful in this direction with B, and do pretty well with F. E would answer well with D, and still better with H. G would have healthy offspring if joined to B, and the stock would be still stronger if he were the husband of F. The physiological fact is, that a married couple should be physically as different from each other as possible in the formation of the face, head, and body; and when those who are barren find on an examination of themselves critically that they are very much alike physically, it would be well for them to investigate the question as to their physical fitness for each other. As all rules have their exceptions, there is one and only one to the rule herein given, which should be mentioned in this connection. Some childless couple may say, "Certainly, we are dissimilar enough." Let us see. The husband is a lean or spare man, with a large, broad, almost perpendicular forehead, and small back-brain, while the wife has a full form, with indications of a decidedly lymphatic temperament. Or perhaps it is the reverse, the husband being lymphatic and the cranial and bodily formation of the wife such as I first described. This pair really look dissimilar enough, to be sure; but one is of what is called, according to Powell, the encephalic, and the other of the lymphatic temperament, both of these temperaments being what are called the non-vital. To this pair no offspring will be born, or if ushered into the world it can have only a brief existence. This is the exception. In all other particulars the more dissimilar a husband and wife are the better it is for offspring.

In the most conspicuous cases of temperamental inadaptation conception cannot possibly take place; in those less marked, impregnation is not impossible, but the fœtus seldom survives the period it should remain in the womb; in those wherein physical adaptation is a shade better, healthy children may be born, but only to fill infant graves. Turning from the more prominent cases of inadaptation, families of children are found possessing all degrees of health and vital tenacity, the more vigorous-looking not always being the toughest and most enduring.

The subject of this essay is a most important one, and should command the attention of every individual whether married or contemplating marriage. As the temperaments will be thoroughly treated of in Part IV., I will not in this place enter into a physiological or nosological explanation of them. In this chapter it is simply my aim to awaken inquiry on the part of childless readers. May not your unfruitfulness arise from temperamental inadaptation? If you cannot decide the question by the general hints herein presented, then turn to page 583, and make yourselves more familiar with the temperaments, and then, if you are still in doubt, present yourselves to the author in person or by letter.

How to Promote Childbearing.

In all cases of barrenness, the husband and wife should first make themselves sufficiently acquainted with their procreative organs and the various kinds of local inadaptation represented in the illustrations, figures 127, 128, to determine if local inadaptation may not be the probable cause. If examination and observation lead to this supposition, proceed at once to overcome the difficulty by such hints as I shall immediately present. First, let it be remembered that usually the most susceptible period for a woman to become pregnant is immediately after the cessation of the menstrual flow. This susceptibility continues for about ten days, when, in women not easily impregnated, it completely subsides. During this period of susceptibility, intercourse may take place two or three times with such aids to conception as follows:—

If the inadaptation be such as is represented by either A or B in figure 127, make a circular cushion as large as the hand, stuffing it with hair or cotton. Then make an orifice through its centre large enough for the male organ to pass through. The thickness of the cushion should be just sufficient to bring the end of the penis, in intercourse, in juxtaposition, or face to face with the mouth of the womb. Use this cushion whenever connection takes place for at least one year, unless the object is sooner attained, for a woman who does not readily conceive may not have more than one or two susceptible periods throughout the whole three hundred and sixty-five days.

If the inadaptation be such as illustrated in C and D, figure 127,

in some cases a bandage fastened tightly around the body of the female, over the region of the abdomen, during connection, will press the womb downward sufficiently to bring the mouth of that organ in contact with that of the male. The posterior of the female body should also be elevated for obvious reasons. Observance of these directions failing after six or eight months' trial, the wife may, in addition thereto, draw in her breath as fully as possible and with it press downward at the moment the male fluids are being received. This alternative should only be resorted to after failure of the first, because this downward pressure of the breath in some women having a relaxed uterus, prevents the seminal fluids from entering the mouth of the womb, but there are cases in which this kind of effort favors conception. If all these plans prove fruitless after one year's trial resort to the impregnating speculum (see page 911). This instrument should also be used in cases of malformation, such as those represented by E, F and H, while in such a difficulty as that illustrated by G, the use of the impregnating syringe will prove the most available (see page 911).

If the inadaptation be such as is illustrated by I, in figure 128, the bladder should not be voided for several hours before, nor until at least thirty minutes after connection. If connection be painful with the bladder thus distended, make a pad of hair or cotton as large and thick as the hand, and another one of the size and shape of half an orange. Attach the flat surface of the latter to one of the flat surfaces of the large cushion right in the centre. Then void the urine before intercourse, and place the conical surface of this cushion over the region of the bladder, or, in other words, a little above the bone at the top of the entrance to the vagina. Fasten it to this place by straps or strings passing round the body. This will produce a pressure against the bladder, and the bladder will press against the upper part of the womb and cause a slight elevation of the neck of the uterus now resting on the back wall of the vagina. To facilitate this object nearly or quite the whole weight of the male body should rest upon that of the female at the moment of the seminal discharge. If this plan fails, in addition to the application of the pad over the region of the bladder, take the precaution before coition to place a piece of wet velvet sponge under the neck of the womb so as to elevate it a little, but press the sponge sufficiently back to prevent it getting out of place. It would also be necessary

to make use of the cushion directed for A and B if the male organ passes beyond the mouth of the womb.

If the inadaptation is such as is represented in either J or K conception would be more liable to take place when a desire is felt for a movement of the bowels, as the pressure of the fæces in the rectum tends to press the upper part of the womb into its proper position, and thereby brings the mouth of the womb away from the front wall of the vagina. If this rule be observed, the fæces should still further be retained for upward of forty minutes after connection, as immediate straining might expel the male germ from the feeble uterus; and it is proper to add, that violent straining at stool within twelve hours after might defeat conception. If the distention of the rectum by the plan prescribed does not sufficiently liberate the mouth of the womb from the front walls of the vagina, insert a piece of wet velvet sponge between the neck of the womb and walls of the vagina, taking care to press the sponge far enough above the mouth of the womb to prevent it from falling out of place. If conception fails after observing the foregoing suggestions for four or five months, it would be advisable, in addition to adhering to the same rules, for the female to make a practice of reclining on her face more or less every night, and for twenty or thirty minutes before connection, and even during connection, if necessary, as this position still further aids in restoring the womb to its right place when the upper and heavier part rests against the back walls of the vagina. In this kind of displacement it may be necessary also to observe the directions given for A and B, if the male organ be long or the womb low down in the vaginal cavity.

If inadaptation proceeds from phimosis, as shown in L, the male should be circumcised, or in other words the foreskin should be removed by an operation. This operation is often performed in the surgical department of my office, and is attended with very little pain or inconvenience.

When the neck of the womb doubles upon itself as (rather imperfectly) represented by M, medical treatment should be resorted to for the purpose of giving it its natural shape. The skillful physician can usually remedy the trouble, but if he fails, recourse may be had to the impregnating syringe recommended for G.

N presents a condition of the vagina that might render childbirth unsafe, if conception were possible. Consequently, the opinion of a

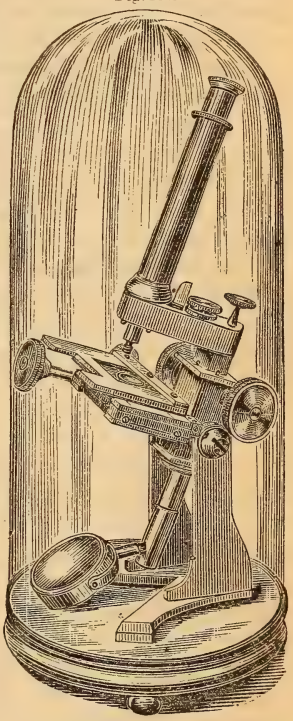
physician should be sought as to the expediency of adopting means that would favor conception. In most cases of this kind the use of the impregnating syringe recommended for G, causes pregnancy to take place; but might it not be hazardous to the wife to encounter the possible perils of parturition? If the congenital or acquired malformation of the vagina can be removed by the surgeon's knife, then conception might take place naturally; but, again, if the surgical operation should materially lessen the elasticity of the vagina, it might not be possible for the living child to pass the inelastic cavity. While some of these cases may be helped out of barrenness without unusual hazard, it would be well for persons who are unfruitful through this cause to obtain the opinion of some experienced medical man.

When inadaptations like those illustrated by O and P in figure 128 exist, it is often necessary to resort to the use of the impregnating speculum. (See page 911). Sometimes, however, in cases like P, barrenness may be overcome by arranging the cushion as directed for A and B, of just sufficient thickness to prevent the end of the male organ from pressing or even touching the mouth of the uterus. This precaution will at least prevent the mouth of the womb from becoming blockaded. When other means fail, an operation may usually be safely performed for the restoration of the mouth of the urethra to its natural place.

When disease exists on the part of either of the married pair causing unfruitfulness, it is always best to consult a physician who has given attention to this branch of physiology and medicine. When possible, medical counsel should be sought by personal application; when impossible or inconvenient, correspondence will be necessary. In the latter case, answers to the questions on page 583 will usually enable the author to determine as to which of the parties is barren, and the cause of the barrenness. In some obscure cases it is necessary to examine the seminal fluids under the microscope before a satisfactory diagnosis can be determined. This may be done by personal application of the husband, or by correspondence. The annexed cut (Fig. 135) represents the instrument with which the author conducts such investigations. It is a powerful one, and so magnifies objects that the spermatozoa of the male placed under its lens looks about as large as those animalculæ in rain water from which the mosquitoes finally emerge. A particle of healthy human

semen no larger than a pin's head presents under the lens of this microscope hundreds of wriggling, frolicking spermatozoa. By a simple process of drying a portion of the spermatic fluids, and subsequently overcoming its opacity, a practised eye can distinguish with considerable accuracy vital from non-vital semen, which fact enables those at a distance to consult the author upon this point in all cases wherein barrenness is suspected to arise from incompetency on the part of the husband.

Fig. 135.



THE MICROSCOPE.

Obstinate barrenness in males is sometimes difficult to cure, and in some instances baffles the skill of the physician. Strange as it may appear, the artificial injection of healthy male semen into the vagina has been resorted to by resolute and determined, but virtuous wives, in their childless despair. Some physiologists claim that the spermatozoa of the male will retain their vigor and impregnating power if put in warm water and injected with a syringe; but no successful experiment is adduced to sustain the hypothesis. Still, there are means by which the artificial injection of healthy male spermatic fluids may be made so as to induce impregnation. In the majority of cases, however, an incompetent husband may be fully restored to all his powers by medicines or electricity, or both. No married pair should despair of having children, until skillful medication has been tried; and proper electrical applications will often cure when the former fails. Too much care to protect the embryo cannot be taken by a lady who, after years of fruitless marriage, arising from disease, becomes *enceinte*. Such a person is much more liable to miscarry, and miscarriages are apt to render a predisposition to barrenness more confirmed. I have had ladies under my care, who, after having by patient perseverance

in my treatment, attained the condition so long sought for, failed to reach the full realization of their hopes by falls, frights, excessive fatigues, or some cause of like nature, and I have found it quite impossible, in some cases, to restore the tone of the productive organs so that pregnancy would again take place.

When excessive amativeness is the cause of unfruitfulness, some rules requiring self-denial and self-control must be observed, or offspring cannot be obtained. If the fault exists in the husband, he must be less excessive in sexual indulgence so as to allow time for the spermatozoa to attain vital development. If he be violent in coition, then he should use the pads recommended for A and B, so that he may not quite touch the mouth of the womb. In some cases of this kind the ejaculatory forces are so great that the fluids will reach the uterus if the glans-penis does not come within two or three inches of it. If the wife be too impulsive, as described in a previous essay on "Excessive Amativeness," she should abstain from intercourse from a week to ten days before and during menstruation, to allow the ova to become fully developed; at the cessation of the menses the husband should induce sufficient excitement in himself to yield the spermatic fluids as soon as the vagina is entered, so as not to arouse the amative excitement of the wife. As before remarked, her participation in the pleasure is not necessary for impregnation, and in a difficulty of this kind it defeats it. Then, for a week, at least, all excitability or indulgence on her part should be avoided so as to give time for the embryo to set. The wife may be materially aided in preserving self-control previous to, during, and for a reasonable time after, impregnation, by avoiding all stimulating food and drink, such as meats highly seasoned, eggs, fish, oysters, clams, celery, parsneps, water-cresses, peppergrass, condiments, wines, liquors, cordials, strong coffee, chocolate, etc. The plainer the diet the better. Injections of warm water into the vagina daily will produce a cooling reaction and lessen excitability. When pregnancy is found to exist, then moderation in sexual intercourse is necessary to prevent miscarriage. No married couple whose cases come under this classification, should become discouraged before giving the foregoing suggestions at least one year's trial. If they fail, medicines adapted to their cases will in most instances accomplish a triumph.

When unfruitfulness is caused by temperamental inadaptation, or

when children are born, and die in infancy, my advice as a physiologist and humanitarian is go to a State where divorces are easily obtained and dissolve your unnatural connection and form new alliances. Depend upon it, God never joined you together, for his moral laws are not in conflict with his physical laws. This last proposition every reasonable mind will accept without argument. It is undoubtedly easier, however, to give such advice than to practise it, for many such unfortunate people are so pleasantly united in taste and social companionship that the thought of separation cannot be entertained for a moment. Then there are many more so situated in property and family matters, or so awed by village opinion, or swayed by some other consideration pertaining in some way to money, position, influence, or the opinions of Mrs. Grundy, that such a step seems to them impracticable. From all these sources will come up the inquiry,—"Is there no other help for us?" To which I must reply—hardly any thing that is legitimate. You may derive some advantage from suggestions given in what I have to say on "Physical Adaptation," beginning on page 805, but either temporary or permanent reassortment is, in most cases, the only expedient that can be successfully resorted to, excepting artificial impregnation, and then the male germs must be obtained outside the family. Many, in their determination to have at least one child, have adopted the first, and a few the last of these alternatives. Some have severed altogether old ties and formed new ones. Those who have a baby every year or two will think these facts strange; but, according to Paul Gide, "the desire for offspring has been, in all antiquity, the prime motive of marriage—the first sentiment that impressed upon the union of the two sexes a moral character and a regular form of marriage." In ancient times fidelity to a barren wife was considered a crime against the gods, and still later, in civilized Europe the husband of a barren women was compelled to renounce her. Manon says—"In India, if the wife is sterile, the husband forsakes her and takes another; if the husband be sterile he cedes temporarily to his brother or one of his male relatives his rights to his wife. This being done to render the marriage fruitful, it is believed to be stripped of all impurity and regarded as a religious duty." In ancient Athens a man could repudiate a wife who could bear him no children, and take another; or, if he preferred, he could take a concubine and legitimatize her children. In the early history

of man, as given in the Old Testament, instances are found wherein the fruitless wife gave to her husband a favorite servant for the purpose of offspring. Human nature has not greatly changed by time or the advance of civilization, and though social regulations forbid recourse to some of the means mentioned for becoming a parent, such expedients nevertheless are privately adopted by those who have become maddened by disappointment after years of fruitless marriage.

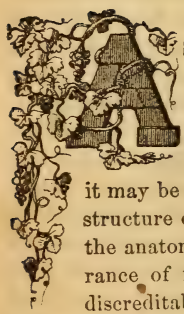
Before concluding this essay, I have a word to say to the jealous husband who is, or may become, the father of an only child after years of unproductive married life, followed, after the birth of one child, with years no less sterile. In some cases, the causes producing barrenness are temporarily removed, even when husband and wife have been pursuing no medical treatment for that purpose. A barren wife may, under an unusual, and only temporarily improved condition of the procreative organs, develop a perfect egg, which may be impregnated and become a healthy fœtus; or a barren husband under a temporarily improved condition of his genital organs, may give to the wife a healthy spermatozoon with like result, but subsequent sterility ought not to lead the husband to suspect the fidelity of his wife, because the reproductive organs of either sex are liable to sudden and temporary convalescence when abnormal, as any other organ in the body. Cases have occurred of persons who have been nearly all their lives blind, but who have suddenly received the gift of sight for a moment, for a day, for a week, for a month, but as suddenly relapsed into the same darkness which had so long enveloped them. Confirmed dyspeptics will occasionally, or for once, be able to eat a hearty meal without suffering the usual distress, in consequence of a sudden temporary improvement of the organs of digestion. So all the organs of the body are liable to fluctuations. If usually in health they have an hour or a day of disease. If usually diseased, they may have an hour or a day of freedom from that disease. The procreative organs are not exempt from this liability.

The foregoing hints are suggested to my mind by some cases of matrimonial unhappiness which have come under my observation. I will relate one in this connection. A lady once called on me who had been married twelve or fifteen years, and had had but one child, and that after nine fruitless years. Her previous and subsequent periods

of sterility aroused the green-eyed monster in her husband and she assured me that her home had been a pefect pandemonium; first, because she did not have a child, and next, because having one, she, did not have more, from which latter fact he imagined he was not its natural father. I would advise all husbands who are afraid to father children which in their jealousy they think do not belong to them, to read my Philosophy of Child-marking (see page 887), which, I think, will have the effect to make husbands more attentive to their wives, in order that they may so win the love of those who are to become the mothers of their offspring, that a child will be marked by them in embryo life. Jealousy and abuse of the wife will do more to insure the birth of children by her resembling other people than could possibly result from actual impregnation by the spermatozoa of others if confidence and kindness be generally manifested by the husband. Treat a wife badly, if the spermatozoon which impregnates her may have been been produced in you, the chances are, the child will resemble some one her mind more agreeably dwells upon. Treat her kindly, and though she may, under a momentary impulse, be impregnated by another, the chances are ten to one the child will resemble you, and, in fact, be your own as much as if the little germ, insignificant in itself, had originated in your own organs of reproduction (see page 894). But, aside from these suggestions, do not suspect unchastity in your wife merely because, after years of barrenness, she accidentally conceives, and then, after the birth of one child, relapses into the former sterile condition; such a circumstance is not uncommon when the mother of the first and last baby never for a moment relinquished the chastity and fidelity which Cæsar demanded that a wife should possess.

CHAPTER X.

PRIVATE WORDS FOR MEN.

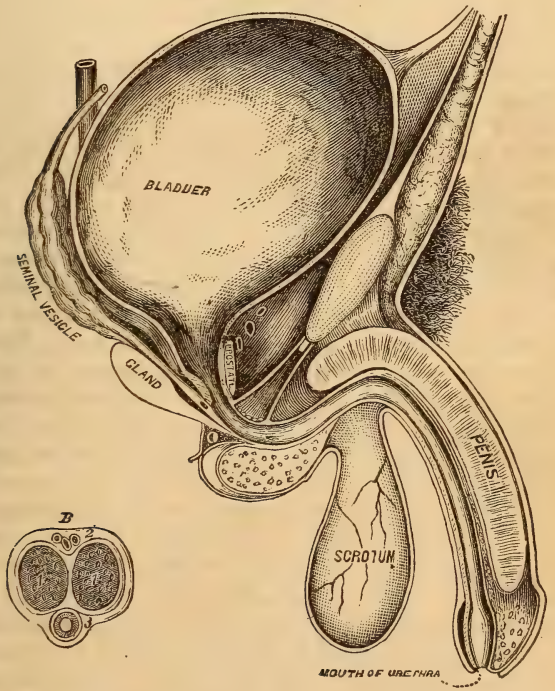


S a rule, men know more of women than they do of themselves, and I will venture the prediction that a majority of them will read the chapter "Private Words for Women" before reading this one which is especially intended for them. Still, it may be said that they are generally better informed on the structure of the male organization, than the women are on the anatomy and physiology of the female body. The ignorance of men, however, in regard to themselves, is highly discreditable when their advantages for information are taken into account. The writer once directed a patient of good general intelligence, filling a government appointment, to make an injection into the rectum for pin-worms, and after a few weeks received word from him that he could not use half the quantity of liquid advised. Upon further inquiry, I found he had mistaken the urethra for the rectum! Persons have told me that they were affected with soreness and swelling of the bladder, when, on examination, I found they were talking about the scrotum! Some men actually suppose that the water and the seminal fluids come from the same reservoir, and that that reservoir is the scrotum! A majority of men imagine that the testicles are connected by short direct ducts with the urethra, and that the seminal fluids are injected directly upward into and out of it. A perusal of this chapter will show what a circuitous route the semen pursues to reach the seminal vessels in which it is held in reserve until emptied by amative excitement. I trust every male reader will carefully look over and digest all I have to present in this chapter, for by so doing he will better comprehend the complexity of his sexual organs and probably be induced to take better care of them.

The Penis and its Diseases.

The penis, two views of which are presented in the annexed cut, is mainly composed of two oblong cylinders, placed side by side,

Fig. 136.



VERTICAL SECTION OF THE MALE ORGANS.

The small cut marked B gives a view of the organ as it would appear if chopped off with a knife or axe.

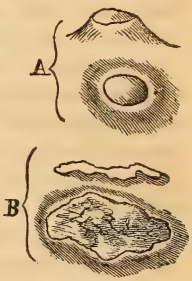
having within a cellular structure, capable of being greatly distended when filled with blood. These two cylinders, which are represented in the small cut B, marked 1, 1, run parallel, leaving a groove above and underneath. The upper groove is occupied by a large vein marked 2, and the under one by a third tube called the urethra marked 3. The urethra is composed of an exceedingly spongy

substance which expands at the apex as represented in the large cut, forming what is called the glans-penis. Through the canal of the urethra the urine is emptied from the bladder, and in sexual intercourse the semen is injected into this canal from the seminal vessels which are exhibited as lying back against the bladder in the large figure. The main branch of the pubic artery enters the penis, the blood from which inflates it during erection. The whole organ is enveloped by a loose skin which is attached at the neck formed by the junction of the glans or head with the external termini of the two cellular cylinders, at which point it doubles upon itself and forms what is called the prepuce or foreskin, which in infancy completely envelops the glans, and in adult age may be drawn over or pressed back of the glans. In repose the penis is shrunken and flaccid, measuring not more than one-third its length and diameter when in the state of erection. When, by amative excitement or titillation, the blood is diverted to the organ, it congests all the cellular and erectile tissue to their utmost limit of expansion; then its average length is five or six inches, and the average diameter an inch or an inch and a half. There are all sorts of deviations from this measurement. I have been consulted by those whose organ distended would not measure more than one inch, and others where it measured over eight inches. Either of these extremes may be regarded as a deformity, and so indeed may be one of four or seven inches. As I am frequently asked the question by letter and otherwise, if this organ when diminutive can be enlarged, let me reply: not a very great deal unless it be shrunken by disease or abuse. When weakened by any cause, its restoration to a condition of health produces a corresponding increase in its vigor and size; but when naturally small it cannot be made much larger, although it may be somewhat developed by means which the author will make known to those who have any personal interest in such information.

The penis is subject to various diseases and some deformities. The most common of the former are those maladies contracted from impure coition. The glans-penis is often scalded by acrimonious leucorrhœal and gonorrhœal secretions with which it comes in contact in the female vagina. When the secretions possess unusually poisonous properties, or when they are syphilitic in their character, the glans-penis coming in contact therewith becomes the seat of pustules and sores called chancre, or, in vulgar parlance, "the pox;" and

these local affections, unless skillfully managed, diffuse syphilitic poison throughout the entire system, and render it liable to all sorts of ulcerous and I may say rotting distempers. There are two kinds of chancre, which are represented in the annexed figure, marked A, B. In from three to eight days after coition with a syphilitic female, an itching and a slight burning sensation are experienced at the spot where the infection has taken place; next a small red spot makes its appearance, upon which a clear vesicle of the size of the head of a pin soon presents itself, the contents of which speedily become purulent. Usually a discharge from this sore follows of matter variable in quantity and appearance, and, in the advanced stages, greenish or grayish and tinged with red. When the base of the ulcer is quite round and hard it may be regarded as Hunterian chancre, such as is represented by A. The upper one gives a view of the side, and the one below it a view of the face of the chancre of this description. When the ulcer has an irregular boundary, with indentations rather than elevations, and a thin coating of grayish matter, accompanied with fetid and bloody discharges from the numerous small vessels it so rapidly destroys, it may be regarded as a phagadenic chancre, such as is represented by B, in which a view is given of the margin as well as the face of the ulcer. The margin of a venereal sore of this description is usually ragged, thin, uneven, and brown or violet colored. The Hunterian chancre is more liable to produce constitutional syphilis, and the phagadenic more apt to destroy the penis and surrounding parts, for it eats away the flesh more rapidly than cancer. It would be useless to attempt to lay down here any rules for the treatment of these dangerous local disorders, for even the attending physician, with all his experience in the management of them, to be successful is obliged to tack about in all sorts of ways to meet the ever-changing phases of the disease, and thereby counteract its destructive effects. Not a moment should be lost by a person who has contracted this disease, in obtaining the advice and medical treatment of a physician in whom he can place the most implicit confidence, for of all the ways to leave this world none are so terrible as to rot

Fig. 137.



CHANCRE.

A, Hunterian Chancre.
B, Phagadenic Chancre.

with the virus from a Hunterian chancre or to be eaten up alive with a phagadenic ulcer.

When men are not cleanly in their habits, the glans-penis may become excoriated by its own secretions. There are located about the neck of this organ, little glands and follicles which secrete an unctuous fluid for preserving the moisture of the glans and foreskin which falls over it. This oily lubricator is as pure as that which is supplied to the eyelids, if the parts are kept clean, but when neglected a chemical change occurs which imparts to it a disagreeable odor, a caseous consistence and color, and sometimes an acrimony which produces inflammation and ulceration. These glands and follicles are less active and their secretions less oily before the age of pubescence, but after this period the genital organs should be washed with soap and water every day, and the foreskin pressed back to receive the full benefit of the ablution. If proper habits of cleanliness were observed by those of both sexes, there would exist less prudery respecting the organs of generation, which in health, with the same care that is usually given to the organs of the face, would be equally sweet and wholesome. No one has the moral right to mingle in social life and come in social contact with his or her friends whose body from neck to feet is not as clean in every respect as the face. No amount of "Night-blooming Cereus" or "French Cologne" about the person will compensate for personal uncleanliness.

Affections of the urethra might appropriately find place here, but as they have already been treated in the chapter on diseases of the urinary organs, it would be mere repetition to more than allude to them in this connection. I may remark, however, that chancre of the urethra is a more common difficulty than many of the profession imagine, because physicians are not apt to discriminate between ordinary and syphilitic gonorrhœa. It should be remarked that the virus of primary syphilis sometimes fails to produce chancre on the glans, while it does take effect in the urethra; and the inexperienced doctor pronounces it gonorrhœa of the ordinary type, and treats it as such, but, of course, without success. I have often been called upon to prescribe for cases of this description which had been badly managed by physicians having little practice in this class of disorders, and who did not for a moment mistrust the true character of the venereal poison. I am not alone in believing chancre of the urethra to be a common disorder. Professor Sigmund of Vi-

enna stated in a lecture upon the subject, in 1853, that of four hundred and eighty-three cases of chancre coming under his observation, in forty-seven of them the disease was located in the urethra.

The prepuce or foreskin of the penis is often greatly inflamed when the glans penis or urethra is affected with venereal disorder. It may also become irritated or inflamed by other causes, such as scalding of the urine, uncleanliness, canker, etc. In nearly all of these cases a weak solution of sugar of lead frequently applied every day to the irritated or inflamed part will remove the difficulty. Considering the unhealthy condition of the human family, its habits of uncleanliness, and the prevalence of uterine diseases among women, it is well, so soon as the age of puberty is reached, to teach the foreskin to remain back so as to expose the glans. Pressing it back every day for a little while will accomplish the object, and the exposure of the glans will toughen this sensitive part so as to render it less liable to contagion and irritation. As an extra precaution, well worth the trouble, the foreskin should be drawn over the glans when visiting a strange "privy" or water-closet, or when sleeping away from home. Then, in coition, if the Membranous Envelope were always employed where there are any uterine affections on the part of the wife, diseases of the glans, urethra, and foreskin would rarely occur. However acrimonious or poisonous the secretions of the vagina may be the Envelope is an infallible safeguard.

When, after the age of pubescence, the foreskin cannot be pressed back of the glans, the difficulty is called Phimosis. In many cases of this kind the foreskin is very long and its orifice contracted or inelastic. Both for the purpose of preserving the health and cleanliness of the glans, and for convenience in coition, this should be removed by the knife of the surgeon. It is a slight and comparatively painless operation, and one which no one so affected should for a moment shrink from. Most of my readers are doubtless aware that the ordinance of circumcision practised by the Jews consists in the entire removal of the foreskin by excision, and observation proves that those people are less liable than others to venereal affections. When habitually covered by the foreskin, the membrane covering the glans is remarkably delicate and sensitive, but when exposed by the removal of the foreskin, whether moved back, or cut away as in circumcision, it becomes gradually toughened

and consequently made less susceptible to the attacks of any venereal poison which may accidentally or otherwise come in contact with it. The [illegible] is also less liable to irritations proceeding from the [illegible] in the secretions of the glands and follicles. Before concluding my remarks regarding the penis, I should say that this organ is as it were an open door for the entrance of many of the diseases which affect the human race. It is so abundantly provided with absorbent vessels and so frequently brought in contact with unwholesome secretions, the system is often poisoned when no local disorder manifests itself. If it were made of ordinary sponge it could hardly be a better conductor of impure fluids directly to the circulatory system; and, if this fact were fully understood by the male portion of the human family, dens of harlotry would soon be closed up for want of patronage, and a man would as quickly bend to quench his thirst at a public sewer, as to visit the abode of the courtesan for the gratification of his amative appetite.

The Scrotum and its Diseases.

By turning back a few pages, and looking at Fig. 136, the location of this pendulous pouch which encases the testicles will be observed. As remarked before, some quite intelligent men think this is the bladder. All such persons should study the figure referred to attentively, and they will see that the location and offices of the scrotum and bladder are widely different and distinct. The scrotum consists of a wrinkled or corrugated pouch, the skin of which has the same structure as that of the other parts of the body, excepting that it is thinner, more delicate, and perhaps more sensitive. A small raised line begins at the root of the penis and extends back on the scrotum so as to divide it into two parts. This pouch is provided with numerous follicles, which bathe the parts with a sebaceous fluid which preserves their moisture and softness. Here is another reason why daily ablutions of the parts should be resorted to by every man to keep these secretions wholesome and free from rancidity and acrimony. The scrotum itself is only liable to such irritations, dropsical affections, etc., as may affect any part of the skin or cellular tissue, and I shall consequently forbear dwelling upon its diseases.

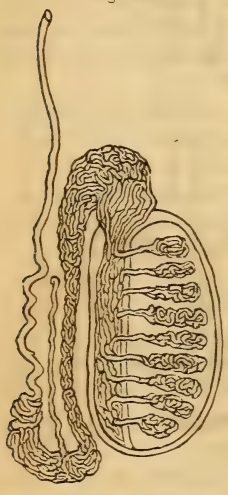
The Testicles and their Diseases.

Under this head I shall briefly refer to not only the structure and diseases of these glands, but to those of the spermatic cords, seminal conductors, vessels, etc. Very few men who carry about these important organs, know much about them. It is difficult to fully explain their structure without employing technical names which would not be understood by the non-professional reader. I will nevertheless try to avoid these, and give as correct an idea as I can without making it necessary for the reader to refer to the medical dictionary.

The testicles are formed in the male babe in womb-life, immediately below the kidneys. This provision of nature is undoubtedly for the purpose of insuring their proper development, for if thus early lodged in the scrotum, they would be liable to contusions by the blind, unintelligent movements of the fœtus, and to a deficient supply of blood if the spermatic arteries were thus early elongated. While nestling beneath the kidneys a cord proceeds from the lower part of each testicle, down through a canal, on each side of the abdomen, in the groin, to the scrotum or pouch which is to be their future residence. The lower ends of these cords are attached to the scrotum. Between the fifth and eighth month they gradually contract, and with their contraction the testicle on each side slowly descends. As the testicles descend, the peritoneum in the lower part of the abdomen, to which the cords described adhere, moves down on either side immediately in advance of the testicle, forming a pouch which becomes one of its permanent coatings. After its descent into the scrotum this portion of the peritoneum closes at the upper ring by adhesion, and this adhesion advances down the track of the spermatic cord, so that the testicles cannot again return to the cavity of the abdomen. The line of this descent is well marked by the spermatic cord, which is designated by 8 in Fig. 139. The journey of the testicles from their original location near the kidneys down to the pouch which becomes their future residence, is usually completed by the eighth month; but instances do occur wherein one or both never entirely leave the abdominal cavity, and others wherein they tarry in the groin. The detention of one or both within the abdomen, or in the inguinal canal in front of the groin, does not materially interfere with their functions, and hence there are

men who are the progenitors of healthy children, who, to all external appearances, are without testicles. The same fact exists in the case of men in whom only one of the glands has descended. Unless therefore the testicles have made their appearance in the scrotum and been removed by disease or the surgeon's knife, no one having this defect need be apprehensive of inability to perform all the duties of a husband, nor think himself incapable of becoming a father. The testicles do not obtain their full size till about what is usually called middle age, at which time their average dimensions are about an inch and a half in length, and an inch wide and three-quarters of an inch thick. The right testicle is usually a little larger and is held a little higher in the scrotum than the left one. The annexed cut, Fig. 138, represents the internal structure of one of these glands, and the ducts, etc., leading from it. Those lobes, presented one above another, are composed of convoluted tubes and they connect with ducts which terminate in two canals which conduct the secretions of the testicles to the seminal vessels, as will be explained by and by. These seminiferous ducts in the testicle are only about one two-hundreth part of an inch in diameter, and when unraveled and drawn out are nearly a mile long!

Fig. 138.

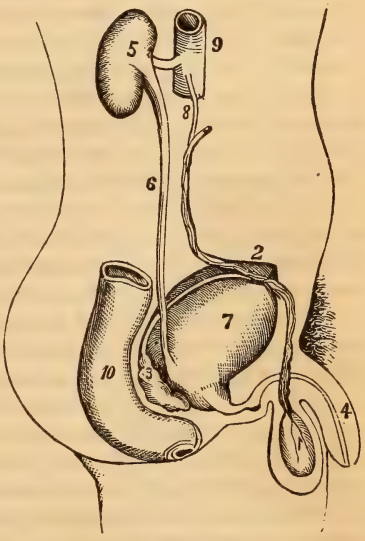


THE INTERNAL STRUCTURE OF THE TESTICLE.

Let us look for a minute at the wonderful complexity of the procreative machinery of man. Along the track of the descent of the testicle on each side of the body, there passes down what is called a spermatic cord, which consists of an artery and veins and lymphatic vessels and nerves. (See 8 in Fig. 139.) The artery is about the size of a crow's quill. This conveys to the testicle the blood from which the gland with all its peculiar mechanism secretes and generates the vital elements of the semen. As before remarked, many imagine that in coition, at the climax of excitement, the testicles inject the semen directly up into and through the urethra. This is not so at all. As the testicular glands make their secretions, they pass them up through a canal called the vas deferens on each side. These

canals have an outer coating like cartilage, but their linings are composed of mucous membrane and their orifices are only large enough to admit a bristle. They ascend with the spermatic cord till they enter the cavity of the abdomen, when they curve over each side of the bladder and bend down and connect with the seminal vessels. (Pause a few moments and look over Fig. 139 with its explanations.) Instead therefore of the testicles participating at all in the sexual act, they are comparatively at rest, and at the climax of amative excitement, their secretions which have been accumulated in the spermatic vessels, are propelled outward by what are called ejaculatory ducts, and passing the prostate and Cowper's glands are mixed with the secretions of these, which contributions add considerably to the volume of the semen. Propelled by the ejaculatory ducts and the simultaneous spasmodic contractions of the urethra, the seminal fluids are emitted with much force in distinct jets from the mouth of the urethra. Considering the complexity of the male organs of generation and the abuses to which they are thoughtlessly subjected, it is not surprising that they are often affected by disease.

Fig. 139.



MALE ORGANS.

1. One of the testicles.

2. Stands above one of the tubes called the vas deferens (the white line), where it leaves the spermatic cord, and conveys the semen to the seminal vessels marked 3. This tube runs with the spermatic cord till it reaches the point just below 2, when it strikes off by itself and dips down to the spermatic vessels marked 3.

4. The penis with the urethra passing through it; 5, one of the kidneys; 6, one of the ureters which conveys the urine from the kidneys to the bladder; 7, the bladder; 8, the spermatic cord; 9, the aorta from which the testicle derives its supply of blood; 10, the rectum.

Venereal excesses on the part of the male, are much more disastrous than those on the part of the female. The reason for this is that the spermatic secretions are composed of the most vital properties which the blood is

capable of imparting. A drop of semen, such as may be taken up on the point of a pin and placed under the microscope, presents hundreds of those little animalcules called spermatozoa, and from this fact it may be reasonably inferred that the vital resources must be severely taxed when the spermatic fluids are prodigally wasted. The injurious effects of an excessive waste of them are well known to every physician who has given a reasonable share of attention to this branch of physiology. In the sexual orgasm the female simply gives off a glandular secretion, possessed of no more vital properties, if as many, as the salival fluids. It is true that in most cases she also contributes a germ called the ovum; but this passes away at its period of ripeness whether sexual intercourse takes place or not. The ovaries are constantly generating ova or eggs and as rapidly as they reach perfection they pass off, so that the loss of these is of no consequence whatever to the health of the female organs. Excesses are however injurious to the female mainly because the nervous system is injuriously affected by too much venereal excitement. In some cases these excesses lead to undue activity of the organ of amativeness, so that even in her dreams she is excited by amative delirium. Sexual excesses and self-abuse on the part of the male leads to what is commonly called seminal weakness or the disease technically called Spermatorrhœa. This trouble is so prevalent and disastrous to health and longevity, I shall leave it here with simply this allusion and resume its consideration in an essay by itself.

The testicular glands are liable to inflammation, congestion, swelling, dropsy, and abscess. I once had a case of abscess of the testicles which had caused an adhesion of the glands to the scrotum, with openings through which the ulcerous matter was poured out. He became the father of one child previous to this affection, but at the time I made the examination he had not for a long time passed a particle of semen in coition, and his testicles were nearly wasted away. It was a remarkable fact, however, that his passions according to his own statement were even stronger and his pleasure in intercourse greater than they were prior to the partial destruction of the glands. It is supposed by many that the loss of the testicles by disease or castration destroys the erectile power. This has never, I believe, been the case in any known instance. Frequently it only destroys the procreative power, leaving amative desire and power of erection intact. In some it paralyzes desire, while local titillation will cause erection.

Varicocele is a common affection among men. This difficulty consists of a distention of the veins of the scrotum and spermatic cord, feeling when manipulated like a bunch of earth-worms. The distention usually increases from below upward, and is less prominent in a recumbent than in an upright position. This difficulty is sometimes mistaken for hernia and *vice versa*. Physicians have sometimes sent their patients to me to be fitted to a truss, when on examination I would find varicocele rather than hernia to be the real affection. Varicocele is not easily cured except by tying the enlarged vein, and this is rather hazardous. The most successful operation and one which answers a very good purpose is to remove a portion of the scrotum so as to render the latter a natural bandage, as proposed originally by Sir Astley Cooper. The least painful mode of obtaining relief is to wear a scrotal supporter. (See page 911.)

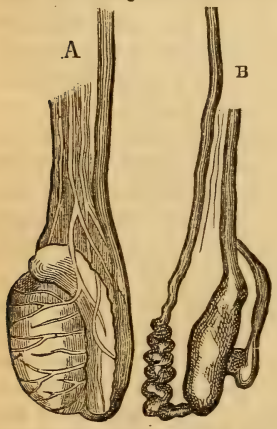
In all affections of the testicles and spermatic cord, a physician should be consulted, and for this reason I shall not enter into a minute description of the various diseases of these organs. Physicians who have not had extensive experience in their treatment sometimes make mistakes in deciding upon the exact nature of a case, and therefore it would be useless for me to attempt to make the non-professional mind sufficiently familiar with the variety of diseases to which these organs are subject, to enable the reader to diagnose correctly for himself. Uncomplicated sarcocele may be distinguished from hydrocele by the fact that the former enlargement does not change materially the oval form or hardness of the gland, while the distention peculiar to the latter imparts a degree of softness and greater enlargement of the lower than the upper portion of the organ. Sarcocele does not usually obliterate all trace of the spermatic cord, while hydrocele fills the scrotum to the ring through which the cord descends so that the cord cannot be felt. When the testicle is held between a light and the eye of the examiner, if sarcocele be present nothing but the dark enlarged body of the testicle can be seen; if hydrocele affects the sack of the gland, that portion distended by the water is transparent, for hydrocele, as its name indicates, is nothing more or less than a dropsy of the membranous sack which envelops the testicle. It often happens, however, that these two affections, sarcocele and hydrocele, exist together, or are complicated with other enlargements of the glands growing out of irritation or gonorrhœal affections of the urethra, or from a condition of

the blood favoring tumorous or cancerous developments, in consequence of which the discriminating eye and touch of the experienced physician should be sought in all such cases if the patient would avoid mistakes and the possible ultimate necessity of castration growing out of neglect or maltreatment.

Seminal Weakness.

This disease is technically termed Spermatorrhœa, and is usually the offspring of masturbation or self-abuse, although occasional instances are met with in which the difficulty was unquestionably inherited from the father. It exhibits itself locally by involuntary discharges of the seminal fluids through the orifice of the penis, or, more properly speaking, from the urethra. In the advanced stages of the disease there is also a wasting away of one or both of the testicles. In the illustrations, Fig. 140, A represents a healthy testicle, and B one which has become wasted by masturbation and seminal weakness.

Fig. 140.



THE TESTES, IN HEALTH AND DISEASE. A represents one in health; B, one wasted by masturbation.

I am almost daily called upon by young men who ask if it is not perfectly natural to have involuntary nocturnal emissions occasionally—say once in a week or two. They have been so informed by their physicians! Such young men are excusable perhaps as they have not had opportunities of knowing better; but it is disgraceful for any man laying claim to a knowledge of physiology to make such an assertion. It is too true that men who are in the habit of cutting up dead bodies, know too little of living ones. Good anatomists are not always astute physiologists. Those who are reputed to be expert surgeons are apt to be the poorest physicians, and really seem incapable of giving any common-sense advice on subjects like the one under consideration. Only recently one of our most eminent surgeons, in a lecture before the Young Men's Christian Association, stated that involuntary emissions were inevitable occasionally, unless prevented by living in

natural relations with the opposite sex. It would seem as though common sense would teach him better; and it would almost seem as if young men themselves ought to know better without being told. It is a rule, having few exceptions, that a person subject to involuntary emissions feels the debilitating effect of them invariably the next morning after their occurrence, while every man of experience knows that sexual connection, when the companion is responsive, leaves no depressing effect upon mind or body, but on the contrary a buoyancy of the former and elasticity of the latter. Throwing aside, however, all reference to effect, with which nearly every one troubled with involuntary emissions is familiar, do we find nature so ready to cast off its vital substances and nervous forces? Is it a fact that Dame Nature is a prodigal--following the profligate and dissipated example of her sons? The seminal fluids are in part made up of the purest and most vital elements of the body. The best material of the whole system is concentrated in the secretion which contains the germs of a new being. Now, why should nature throw away this fluid any more than it should throw away blood? We find that in all cases involuntary expenditures of blood are hemorrhages, resulting from a diseased state of the system. The fluids which are of no use to the system are secreted by the kidneys, and thence poured into the bladder to be removed at the convenience of the person. The more solid effete matters are gathered into the colon to be expelled periodically through the rectum. Even these functions are not performed involuntarily unless disease exists. Now if it were necessary that the seminal fluid should be disposed of at certain intervals, why are they not absorbed and removed by those channels provided by nature for the expulsion of waste matters, instead of disturbing the rest and quiet of the dreamer and so far deranging the nervous system as to produce depression of spirits, headache, and lassitude the succeeding morning? To all this it may be objected that once a month, the female loses blood, from the age of puberty to the turn of life, in what is called the function of menstruation. If the objector be a physician, knowing as he should the quality of that blood, I would ask if he really believes that menstrual blood possesses any vital properties? Is it blood at all in the sense in which we employ that term in speaking of the fluid that circulates in our arteries and veins and supports life? Does he not know, and does not every woman know, that when pure arterial,

instead of menstrual, blood flows from the vagina of the female, it is at once called uterine hemorrhage instead of menstruation? Does such a physician believe for a moment that any such draft is made upon the system to supply the menstrual secretion as takes place when the spermatic vessels are supplied with their secretions? Will he for one moment place the spermatic secretions and menstrual fluids side by side as possessing equal life and vitality? Is it not a fact that while the spermatic secretions are teeming with life, the menstrual secretions are as effete in their properties as the urine? In another place it will be observed that I speak of the ova of women passing off involuntarily. But these ova or eggs are not composed of vital constituents. Calcareous or earthy substances combine with various animal matter of a non-vital character to produce them. They exhibit no actual life under the microscope, and possess only earthy matters in common with semen.

It may be asked, if the seminal secretion is so vital, how it happens that married men and others who are perhaps excessive in its expenditure do not feel injury from its loss? To these queries I would reply, that in natural intercourse there is at least a partial if not complete compensation received in the act, as explained in my essay on the philosophy of sexual intercourse (see page 622). Excesses, however, will lead to seminal weakness and in time induce a train of disorders not unlike those developed by masturbation or involuntary seminal emissions. I have said in one place that it is a rule, having few exceptions, that unpleasant effects follow involuntary losses of semen, such as physical lassitude, mental depression, etc. I might have added that even these exceptions finally arrive at the same condition; and that the weakness, if not cured, invariably leads to that injury of the parts which induces losses with the urine and at stool; the weakness finally eventuating in impotency. I know all about it, because I am perfectly conversant with the history of thousands of people who have been affected with this difficulty; have met them daily in my office for fifteen years, and probably have had a larger practice in this class of diseases in office and by mail, than any other physician in New York City; and any medical man who has so little knowledge of spermatorrhœa as to say that it will naturally occur in young men at certain intervals, should lose no time in explaining why nature provides such a function when it leads to such fearful results. Such advice, unless correct, is mischievous and tends to still

further demoralize the patient. I have been told by young men laboring under the supposition that these involuntary emissions were natural, that they had practised masturbation once in a week or ten days to prevent this natural overflow, remarking that they felt better when they did so than when they allowed the loss to take place without assistance. There is not a particle of doubt in my mind that the immediate effect is better. The ultimate effect is worse, simply because it is continually aggravating the spermatic weakness which they are endeavoring to palliate.

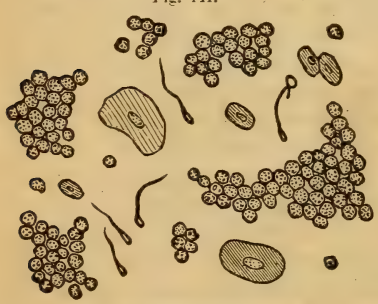
Some patients have said that they felt better by continuing their practice of masturbation. This was because the habit had induced such an unnatural activity of the testicular glands that the spermatic vessels became congested with the seminal secretion, and the removal of this secretion at such times produced possibly as great a sense of relief as bleeding at the nose in those persons who are subject to congestions in the head. This, however, is a most ruinous way to relieve congested vessels, for no sooner are they emptied, than they begin at once to fill, and soon reach the state of renewed congestion. The proper remedy is to restore them to their normal action, and not still further increase their excessive activity by repeating that which led originally to the whole difficulty. I have been asked what becomes of the seminal secretions if not passed off naturally or involuntarily. I answer: they are re-absorbed or taken back into the circulation, the vital constituents going to vital centres to strengthen them, and the earthy properties to the bones, hair, nails, etc., to build up the masculine qualities of the man. (See page 612.) But in no case does nature dispose of these vital fluids by involuntary emissions excepting when the parts are diseased.

There are, in reality, two kinds of spermatorrhœa, which are of so opposite a nature that treatment beneficial to one is injurious to the other. One results from excessive expenditure of nervous stimuli on the organ of amativeness and the organs of procreation; and the other, from a want of nervous vitality in the procreative organs, while the organ of amativeness may or may not be abnormally excited. In the former, or where there is undue excitability of the organs of amativeness and generation, emissions occur with erections, and usually under the influence of lascivious dreams. The victim is suddenly aroused under the most intense amative excitement, just as the seminal fluids are ejected, or, in some

cases, he may not discover what has happened until some time afterward, although he remembers, either clearly or vaguely, the amorous dream under which the excitement and seminal loss took place. A person predisposed to this form of the disease may have it greatly aggravated by pin-worms in the rectum, or by any affection of the vascular system which produces an itching humor in the urino-genital organs. The worms will so titillate the nerves leading to the sexual parts, that erections and losses of semen result. A slight inflammation or eruption in the neck of the bladder may, when the latter becomes distended with urine in sleep, cause an erection ; and if the person becomes sufficiently awakened to get up and urinate, an unnatural emission of semen may be avoided. If he does not, the debilitating discharge is almost sure to take place.

The other form of spermatorrhœa, arising from a relaxed condition of the organs, or, in other words, from a want of proper nervous stimulus to give strength to the spermatic vessels and ducts, is usually the most difficult and troublesome. It is the open door to impotency, and frequently the latter exists with it, or perhaps I had better say, that it continues after impotency has taken place. A person afflicted with spermatorrhœa of this character loses the seminal fluids on almost any occasion giving rise to amative emotion, or physical effort. They exude when in the company of ladies, or in riding, walking, or urinating, and particularly at stool, if costive. Fig. 141 represents a microscopic view of the floating mucus and spermatozoa as found in the urine of one afflicted with this disease. The spermatic fluids may be wasted in this way for weeks, months, and sometimes years, if the constitution of the victim holds out so long, without his being aware of the drain which his system is laboring under, although he cannot fail to suffer from its effects. Some persons of constipated habit, troubled with this form of spermatorrhœa, eject large quantities at

Fig. 141.



SPERMATOZOA, ETC.,
Discovered, by the aid of the microscope, in the urine of one having the worst form of spermatorrhœa.

every stool; others will merely find, by examination, a drop or two oozing from the urethra. These diurnal losses are, if possible, more exhaustive than the nocturnal, and the mental sufferings of the patient are usually intense.

I have yet to speak of a more difficult and debilitating form of spermatorrhœa than what I have already mentioned, and that is a complication involving both of the forms described. Persons affected in this way will have occasional erections, attended with frightful losses, while they are almost constantly suffering with diurnal discharges. Their procreative organs seem to be vibrating between an excess of nervous stimulus and an entire want of it. There is seldom, in such cases, any control of the parts. Erections will take place involuntarily, when cohabitation is not thought of, but when desired, the erectile tissue and muscles are flabby and powerless.

The local symptoms attending the several phases of spermatorrhœa I have already given. The constitutional symptoms are various, according to the temperament and idiosyncrasies of the invalid. In some cases only a little nervous irritability or debility is experienced, while the mind gradually loses its vigor and activity. The victim is no more aware of the gradual approach of imbecility than an old, infirm man who is losing his faculties day by day and seems unconscious of declining intellect, and feels exasperated if his abilities are questioned. Another is alive to his actual condition—finds his memory waning—his powers of concentrating thought declining—and both his bodily and mental energies wasting away. Still another loses suddenly his mental powers, and becomes idiotic or insane. Still a greater number live in the greatest mental and physical despair, if not actual wretchedness. Hypochondriasis seizes upon them;—they are full of whims and bugbears; they imagine the approach of all sorts of evils; feelings of dread constantly overpower them; and they fear death as if it were a plunge into a pit of burning sulphur or something worse, and nothing in nature can excite their admiration or awaken within them pleasurable emotions. They are blind to the beautiful things a generous Creator has strewn in their pathway, and a look upward at night-time into the begemmed heavens, bewilders rather than enchants their depressed and troubled spirits. Their imaginations are wrapped in a pall of horrors; and though they may occasionally peep through its folds, and catch a ray of hope and sunshine, a little thing startles them, and they

turn from a world of horrors without to a temple of terrors within. If these mental hallucinations do not harass them they are dizzy-headed, short of breath, dyspeptic, victims to sleeplessness, neuralgia, pains in and palpitation about the heart, debility, nervous irritability, fretfulness, and melancholy. I do not mean to say that one person suffering with spermatorrhœa has all these troubles; but every sufferer has one or more of them, depending upon the sensitiveness of his nervous organization and the length of time his disease has affected him.

What adds most to the horrors of this malady, which drains off the most vital fluids of the organism, and strikes at the intellect and manhood of its victim, is the ignorance of the profession generally in its treatment. As a rule, medical men treat one form of the disease precisely as they do the other, and this lack of discrimination and discernment aggravates the trouble, and destroys the confidence and hope of the patient. Then, too, local remedies are generally too greatly relied upon. I have already shown that the disease in its various forms, is perpetuated by nervous derangements, or I have at least explained the manner in which nervous irregularities produce the losses. There is either an excess of the nervous forces precipitated on the organ of amativeness and the procreative system, or else there is a moiety, except in cases of complications such as I last referred to, in which there is a vibration between the two extremes. Consequently the nervous system must receive especial attention. To regulate the nervous circulation, or, in other words, to restore the nervous harmony, is in fact to effect a cure. At least that is the conclusion I have come to after treating successfully nearly every case which has been placed under my care, and I have had many which were regarded as extremely difficult, and any number of those which were considered incurable under the ordinary systems of medication.

After perusing my remarks at the commencement of this essay, the reader cannot infer that I am unaware that masturbation and sexual excesses are usually the first causes; that in consequence of children not being properly instructed by parents with regard to the evils of self-pollution, they nearly ruin themselves before they know any better; that grown-up boys, or those calling themselves men—married men—destroy the tone of their reproductive organs by sexual excesses and other pernicious practices treated of in this book.

But all these evil practices induce the troubles which follow, by deranging the nervous circulation, or by robbing the system of nervous vitality. It is true, the vascular fluid or blood suffers from a waste of the seminal fluids, because the latter are largely composed of its very best properties; but the nervous system is always the more disturbed, and requires the more particular attention. My custom is, to treat the disease with reference to all derangements involved, combining the remedies in such a way as to reach all, and yet the nervous derangements command my greatest care, and the removal of these is invariably succeeded by a discontinuance of the involuntary discharges.

While, as remarked in the preceding paragraph, the causes are usually self-induced, I have met with cases wherein seminal weakness was undoubtedly inherited. One of the most marked illustrations of this kind occurring in my practice, was that of a young man of about twenty-five, who, at the early age of eight years commenced having nocturnal losses without any knowledge of the practice of masturbation. At first they occurred about once a week; at the age of sixteen they happened as frequently as every alternate night, and before twenty, while losses continued both night and day, he was entirely impotent. At the time he first called at my office he had been pursuing the advice of various doctors for some five years without material benefit. Having become interested in a young lady whom he desired to marry, he had, on the confident assurance of a cure from one of the most eminent surgeons of New York, made an engagement of marriage. At the close of several months of surgical treatment, as unsuccessful as it was painful, the young man became frantic with a realizing sense of his position. Said he to me—"Doctor, if you fail, I die a suicide; I cannot tell this young woman of my infirmity; I cannot enter marriage with it; I cannot break my promise. My mind is firmly made up. I have heard of your success in these difficulties, and if you cannot cure me I shall put an end to this wretched existence." A minute history of the events attending the treatment of this case would be too lengthy to be interesting—the ups and downs of the young man's hopes—the encouragements and discouragements of physician as well as patient for the first two or three months; but by the end of the fifth, victory seemed promising, and at the close of the sixth, certain. At the end of eight months, the unmistakable success of the treatment was celebrated by his

marriage. Although this was some four years ago, since which time I occasionally meet my former patient, the cure seems permanent, and the young man is grateful and happy.

Persons afflicted with spermatorrhœa cannot be too strongly cautioned against the various clap-traps and catchpennies of quacks and empirics who profess to have some remarkable panacea for the disease. It cannot be too generally known that a "one-cure-all" cannot be made to suit everybody's case, even if it be possessed of some degree of virtue; but by far a greater number of the advertised specifics are not only worthless but positively injurious. Some of the more powerful of them tend more to dry up the seminal secretions than to impart power to the vessels and ducts to retain them. Thus sterility or impotency instead of the restoration of the parts is effected. Those who have tried them, need not be assured of what I have stated, but I give currency to these facts, for the benefit of those who have not yet been victimized by these pretentious, worthless, and too often harmful panaceas. It is a false supposition entertained by many that marriage cures seminal weakness. There may of course be exceptions, but as a rule a cure cannot be effected by taking this step. It simply amounts to this: the secretions of the testicular glands are discharged by a natural process, before time is allowed for them to pass off unnaturally. The weakness and nervous irritability of the organs still remain. Unless cured, premature impotency eventually takes place. With this difficulty it not infrequently happens that a middle-aged man is as powerless in the organs of generation as the majority of men are at the age of eighty years.

Treatment, to be efficient, must be especially prepared for the case, for an invalid can ill afford time in experimenting in the use of nostrums of doubtful utility. Every reader at a distance should state frankly, in answer to the questions on page 583, every symptom attending his case, so that a correct diagnosis can be given, and all who become my patients may rest assured that my best efforts will be used for their permanent restoration. Such revelations need not be made by those who call on me at my office, for I can readily detect the nature and extent of the disease in cases personally presented. While most physicians inquisitively examine their visitor, the marks produced by the affection are reliable tale-bearers to my perception. I have treated too many affected with spermatorrhœa not to recognize its victims.

Satyriasis.

The title of this essay is the name used to designate a morbid amative passion in males. This *disease*, for such only can it be called, is barely recognized by the medical profession, entirely ignored by the legal fraternity, and any violent manifestation of it denounced as a crime by the judiciary. While the intelligence of mankind has so far advanced that many life insurance companies have come to regard a suicide as an insane person, whose death entitles his heir to the insurance money, the law in many States of our Union inflicts the penalty of death upon a man who, through the insanity induced by ungratified amative passion, commits an act which is denounced as the crime of rape. Woman, more merciful, if she had power to make laws, would probably consider the destruction of the sexual organs of the unfortunate criminal as a penalty fully commensurate with the magnitude of the offence. Indeed we had an illustration of this in an orphan asylum in this State not long ago. A boy of ten years of age, who was detected in an act of impropriety toward a little girl—also an inmate of the institution—was spared his life by the gracious matron, who was satisfied with causing the destruction of the offending juvenile's genital organs by the application of that soothing emollient, oil of vitriol !

It is perhaps a little difficult always to discriminate between willful perversity and "moral insanity," but offences are sometimes committed, wherein the circumstances attending their perpetration plainly show that the offender was not of sane mind. When the wife of an affluent and highly respected citizen, surrounded at home with every luxury heart could desire, is so afflicted with a propensity to steal, that the husband gives notice to the merchants to watch her and charge her thefts to his account, the doctors and men of law pronounce the insane peculiarity a disease which they call kleptomania. There are ever so many manias, the victims to which should be placed where they can do no harm to their stronger minded and more fortunate neighbors, but who do not deserve punishment as a penalty for crime. Orderly, sound-minded people need protection from the unaccountable freaks of those who are subject to some kind of mania ; but it seems to me no mania is so injurious to the public peace as to deserve the extermination of those who are liable to its attacks.

Satyriasis is most unquestionably "moral insanity," and is generally, not always, the result of sexual starvation. It is a noticeable fact that abstinence from carnality on the part of woman generally leads to partial or entire loss of amative desire, while the abstinence of a passionate man, in most instances, aggravates his amative appetite and drives him to madness. It will be found on investigation usually that the perpetrator of rape has either been so isolated from the society of females as to be sexually starved, or to have been fed on the husks of harlotry till he is driven mad with desire for wholesome sexual gratification. He is like the beggar who has been for a long time without food, or else fed on the pickings from ash barrels, until, finally, standing before the tempting window of the bakery he madly dashes his hand through the pane for the coveted loaf.

Rape is a terrible offence to a pure woman, married or single; but morally and physically, unless the perpetrator be diseased, she receives not much greater injury than if, under fright she had fallen on something which had inflicted a similar shock to nerve and physical tissues. I say physically and morally, because I am aware that public sentiment makes a good deal more of it. It is due to society that a man who has thus given way to unbridled passion be placed where he cannot again commit the offence; but it is murder to take his life with legal hemp or to dispatch him with the bullet. He is an insane man. He should be confined and put under mental and moral treatment and low diet. There is better chance of making a good citizen of him than there is of making an honest and peaceable man of a pickpocket or housebreaker. Under the influence of honorable marriage he might become a worthy citizen—a good husband—a kind father. The very act he has committed is not considered a crime in wedlock, although when committed against the remonstrance of the wife it should be so! The law takes no cognizance of legal rape!

That I may be fully understood I will add a word or two by way of qualification of the foregoing paragraph. A pickpocket or housebreaker or a shrewd swindler possesses traits of character which must be actually eradicated to make him a good citizen; his character must undergo a radical change. The perpetrator of a rape may be a man of genial disposition, of strict business integrity, but of such unconquerable passion as to outrage another for its gratification.

His fault may be overcome—his passions subdued or at least placed within his control by marriage. He consequently possesses no quality which must be thoroughly rooted out, such as the reformer always encounters in making a good man of an ordinary criminal, to refit him for honorable and peaceful citizenship.

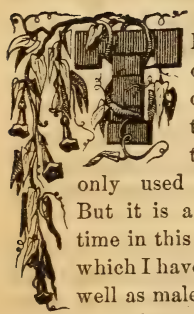
The man conscious of having ungovernable passion and sincerely wishing to reduce it to proper limits has remedies within his reach which will in most cases enable him to maintain self-control. They are—a plain vegetable or frugiverous diet; avoidance of condiments and stimulating drinks; the use of refrigerent medicines, such as epsom salts, seidlitz powders, citrate of magnesia and mineral waters; a daily ablution of the genital organs with hot water, followed with cider vinegar freely applied with a sponge. The local baths should be hot rather than cold, because when warm they produce a cooling reaction. When this treatment proves insufficient, consult some sensible physician, who, if familiar with the management of satyriasis and the adaptation of remedies to temperaments, will have little difficulty in affording relief.

To conclude this essay let me urge a change in public sentiment in regard to this form of disease in both sexes which manifests itself in ungovernable amative passion. It is invariably the result of derangement of the procreative system or of sexual starvation. In either case the offender deserves pity, and aid in reformation. In its most flagrant manifestations it is without question necessary to confine the patient until the mania subsides and there is positive evidence of so complete recovery and reformation that pardon and release will not imperil personal safety. The marriage of such a person to a companion mentally and physically adapted would, in nearly all cases be sufficient guaranty of future good behavior.

As THE TREATMENT OF DISEASES presented in this chapter has been already spoken of in each essay, this paragraph may be made a short one. I have endeavored to give under the head of "Private Words for Men," information which, judging from an extensive correspondence and practice, is much needed. Any one desiring advice or instruction not found herein is at liberty to consult the author; and those wishing his personal services in any difficult case, if unable to apply in person, are referred to Chapter XIII., in which questions, etc., are presented for the guidance of those who desire to consult by letter.

CHAPTER XI.

IMPOTENCY.

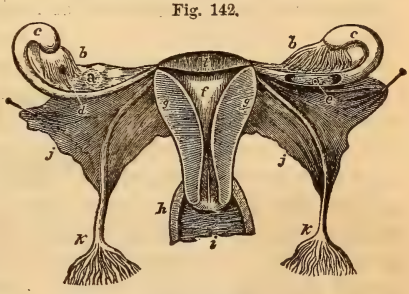


THIS term may be properly applied to that inactivity of the organ of amativeness, or that interruption of its nervous or electrical communication with the procreative organs, which paralyzes the erectile tissue or muscles of the latter. It is usually only used in speaking of such difficulties among males. But it is a physiological truth, promulgated for the first time in this place, unless contained in some medical work which I have not had the pleasure of perusing, that females as well as males are sometimes impotent. I know how the lexicographer defines the term, but I claim for it a more extended application than is usually conceded, and the correctness of my position will be made plain in a few paragraphs.

What is termed "erectile tissue" seems to consist of loose elastic tissue intimately interwoven with nerves, and divided into multitudinous cells, into which, under excitement, blood is forced, filling or congesting them to their utmost capacity. The penis and glans-penis of the male, and the clitoris, nymphæ or internal labia, and a portion of the vagina of the female, are largely composed of this tissue, and the nerves in these parts being numerous, and in a healthy state sensitive, a little titillation will give them prominence and turgidity. Or, if the organ of amativeness becomes aroused without any such local titillation, it precipitates such a supply of electrical stimuli upon the nerves of the organs under its control, that they suddenly become erected. The nervous forces so sent not only contract the muscles of the arteries adjacent to the erectile tissue, by which their blood is forced into the latter, but the heat which the presence of the nervous stimuli creates, also invites the pressure of

blood. Every person who has ever immersed his feet in hot water, has undoubtedly noticed how distended the veins of them become. This is not in consequence of the contact of the water itself with the feet, but because the water imparts its heat to them, while the blood is ever ready to congest any part of the system which is unduly heated. Now, whether or not the external temperature of the erectile tissue is heightened, so as to be perceptible, when the organ of amativeness warms it up with its magnetic influence, certain it is, an unusual degree of heat is present therein, and that there is every incentive given for the blood to occupy and distend it, as well by invitation as by coercion.

Fig. 142.



WOMB, OVARIES, FALLOPIAN TUBES, ETC.

a, right ovary; *b b* the fimbriæ on either side. On one side the fimbriæ are seen spread over the ovary and on the other in the act of taking up an ovum or egg from the ovary; *c c*, the fallopian tubes; *d*, an ovum being grasped by the fimbriæ; *e*, an ovum descending the fallopian tube toward the womb, after having been taken up by the fimbriæ; *f*, cavity of the womb; *g g*, body of the womb; *h*, wall of the vagina; *i*, vagina; *j j*, broad ligaments; *k k*, round ligaments.

But it is not by congestion of the erectile tissue alone that the penis of the male and the clitoris, nymphæ, etc., of the female become erected under amative excitement. All of these organs are also provided with erectile muscles, which, when free from the presence of the electrical excitation, are flabby and shrunken in size, and under excitement, extended and rigid.

The fallopian tubes of the female which carry the egg from the ovaries to the uterus, not only seem to be spongy bodies, capable of distention by congestion of blood in their cells, but like the penis, clitoris, and other erectile organs of both sexes, are also provided with erectile muscular fibres. These tubes, commencing at the uterus and terminating in a fringe-like protuberance called the fimbriæ, in juxtaposition with the ovaries, are represented by *c c*, and *b b*, in Fig. 142. During coition, if the female is not impotent, the fallopian tubes are erect, and at the climax of the act, the fimbriæ grasp the ovaries. If the egg or ovum is matured, it is sucked up by them

and carried to meet the spermatozoa of the male for impregnation. I know it is disputed by some physiological writers that the fimbriæ grasp the egg under the influence of the sexual orgasm, but their objections are poorly supported, or I might better say, well refuted by facts.

Blundell says : "The vaginal canal during heat is never at rest; it shortens, it lengthens, it changes continually in its circular dimensions, and when irritated, especially, will sometimes contract to one-third its quiescent diameter. In addition to this, the vagina performs another movement, which consists in the falling down, as it were, of that part of the vagina which lies in the vicinity of the womb, so that every now and then, it lays itself out flatly over this orifice, as we should apply the hand over the mouth in an attempt to stop it." The entrance to the vagina is also provided with a sphincter muscle, which, in health, contracts so as to prevent, in a measure, the escape of the seminal fluids injected therein.

Now, then, in my opinion, when the organ of amativeness is cut off from proper electrical communication with the erectile tissue and muscles, so that the erection and proper action of the procreative organs are imperfect, the disease may be properly termed impotency, whether the person so affected be female or male. The disease, whether it exists in one sex or the other, is certainly identical in its nature and effects.

The fact that the organ of amativeness in the congress or parliament of the mental faculties, is the member who governs the amorous impulses, that the organs of generation act under its direction, and that it communicates with the latter by the nervous telegraph between them, is illustrated in cases where the cerebellum (the part of the brain where amativeness resides) becomes diseased or impaired by accident. I have, at this time, a very respectable married woman under my treatment, whose cerebellum is the seat of painful neuralgia, and since the advent of this disease, she expresses the belief that neither marriage nor sexual intercourse is right, and it is with difficulty her friends can prevent her from separating from a kind and devoted husband, to whom she had, previous to this attack, been fondly attached. Pancoast mentions the case of a young officer, who, on the eve of marriage, received a "blow on the occiput (back of the head) by falling from a horse. He became impotent without any other derangement of his bodily or mental functions, and in his

distress, upon discovering his imperfection, committed suicide on the morning fixed for the wedding."

The various members of the body are, in health, under the control of the congress of mental organs. If a mechanic wishes to build a house, Mr. Constructiveness telegraphs to the hands and feet to proceed to execute the work. A congress of the various organs convenes, and Messrs. Causality, Comparison, Size, Ideality, etc., etc., all have a voice in the matter. But Mr. Constructiveness is the "boss of the job" and sees that the work is done up "ship-shape." But if Mr. Constructiveness is shut off from all communication with the hands and feet by what is termed paralysis, then the hands cannot perform the work, and Mr. C. might as well shut up shop until the telegraphic or nervous communication is opened, and he obtains control of the wires or nerves. Now amativeness and philoprogenitiveness have agents to do their work. But if telegraphic communication is cut off between the base of the brain and the organs of procreation, impotency is the result.

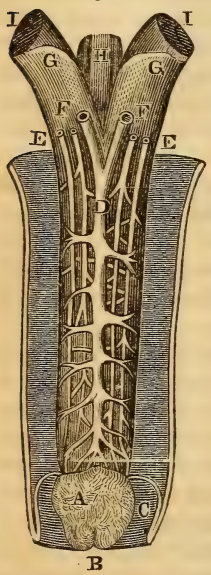
Excessive study will sometimes so divert the nervous forces from the base of the brain that perfect disinclination for sexual intercourse will ensue, to those who previously possessed much amative passion. Here the intellectual organs consume all the brain nerve-force and starve out amativeness. On the other hand, cases occur, in which both men and women, by thinking too much of sexual matters, or from some other cause, which inharmonizes the distribution of the nervous forces among the mental faculties (so that the organ of amativeness is unduly excited), become crazy in ungovernable desires for constant gratification of their sexual instincts. This disease, when it affects females, is called nymphomania; when it affects males, satyriasis.

Sometimes, the erectile tissue and muscles of the procreative organs are supplied at intervals, with nervous or electrical stimuli from what is called the inferior plexus, near the terminus of the spinal column, while all direct or instantaneous communication between them and the organ of amativeness, seems to have ceased. In these cases erections will occur involuntarily or by titillation of the parts, but they generally become flabby and powerless in any attempt at copulation. Such cases are not at all uncommon among males, for I have treated many of this description, and it is probable the difficulty is quite as common among females, although I have not

had so many cases from among the latter, nor does it prevent them from indulging in a spiritless union with the opposite sex.

Impotency in either sex, does not necessarily produce barrenness. If the testicles of the male secrete semen, containing healthy spermatozoa, and the ovaries of the female produce completely formed ova or eggs, then they are not in the strict signification of the term barren. In fact, impotent women do in many cases conceive by the spermatozoa being injected into the mouth of the womb, and there finding a matured egg, which, if not taken up by the fimbriæ of the fallopian tubes during coition, may have entered and descended one of the tubes a short time before.

Fig. 143.



FRONT VIEW OF THE PENIS. A, the glans-penis, the corrugated lines indicating the appearance of the erectile tissue under the microscope; B, orifice of the urethra; C, the fore-skin; D, the great vein; E E, nerves; F F, arteries; G G, cavernous bodies in the penis; H, urethra; I I, the erector muscles.

The organ of philoprogenitiveness is often active when the organ of amativeness is powerless, and the difficulty in the way of the impotent man, if he has healthy spermatozoa, lies in his inability to penetrate the female organs. Still, under a local excitation of the parts, if taken advantage of, the act may be accomplished. In some cases, amativeness may even be active, and the person may have the strongest desire for sexual intercourse without the ability to perform the act satisfactorily. When this is the case, amativeness is sufficiently stimulated by the nervous forces in the brain, but either the nervous communication between it and the sexual organs, or else the nerves in the sexual organs themselves, are paralyzed or partly so.

The causes of impotency are as numerous as those which produce nervous inharmony of any kind. Perhaps the most common are, intemperance in the use of stimulating food and drinks, masturbation, and sexual excess. Among women, sedentary habits may be the most frequent cause. Their muscular systems become relaxed, and their nervous systems disordered, for want of pure air and out-of-door exercise.

Impotency often causes matrimonial dissatisfaction, and in nearly all communities, this infirmity is deemed sufficient cause for divorce. A case made prominent by the high position of the parties thereto, was decided in the English divorce court, a few years ago. According to the newspaper report published at the time, "Mademoiselle Victoria Balfe, a daughter of the great composer, was plaintiff for divorce against her husband, Sir Henry Crampton, formerly Minister of Great Britain in the United States and afterward in Russia. Sir Henry was married to Miss Balfe at St. Petersburg, in 1861, and now the lady claims divorce on the ground of unconsummated marriage and the inability of Sir Henry to complete his part of the contract. The case was one of unusual interest, and the celebrated accoucheur to the Queen, Dr. Locock, was called upon to make a medical examination; but Sir John declined to submit. During the trial a question was raised as to the right or power of the court to order such examination; but it was shown that the ecclesiastical court has often done so in the case of clergymen, and so it was established. Counsel for Sir John then declined to offer any defence, and the court declared the marriage null and void—and so Miss Balfe is still Miss Balfe and Sir John is a free man."

Various medical devices of a topical or local character have been resorted to by physicians to cure the disease, and it seems to me that no argument is required to prove their inefficiency. The seat of the disease, as I have already shown, is not in the genital organs, except in occasional cases. In a great majority of them the disease is the result of a want of proper communication between the cerebellum and the organs of procreation. What is wanted then, is some remedy or remedies calculated to re-establish that connection. Is it not self-evident that electricity in some form is alone capable of effecting this result? Unless the communication has been interrupted by the destruction of some portion of the nerves connecting the upper organs with the lower ones, by a knife, rifle-ball, or other missile penetrating the body, of course the lines or nerves for such communication are there the same as before impotency. All that is necessary is to *stimulate them into activity*, and render them once more conductors of the telegraphic messages which amativeness desires to send. If the impotency results from inactivity or partial paralysis of amativeness itself, then that must be awakened to new life. In all other forms of paralysis, or want of nervous action in

any part or parts, it is universally conceded that electricity is the true remedy. Then why not in this? All these arguments, however, are only necessary for such persons as are afflicted with impotency who have never stopped to consider the pathology of the disease, and the most rational mode of effecting a cure. I will close this essay by inviting all who are laboring under this mortifying disease to call on me in person or consult me by letter. (See page 583.)

CHAPTER XII.

CONCLUDING ESSAYS ON DISEASE.

HAVING already occupied a greater amount of space than was originally assigned for Part II., to save all fractions of blank pages which are liable to occur at the conclusion of each chapter, I propose to present under the above heading a few brief essays on diseases of too important a character to pass over in silence. It may be thought by some that I have given undue prominence and unnecessary length to my treatises on the procreative systems of each sex, and that a portion of the space occupied by them might have been more profitably used in the consideration of the pathology and treatment of diseases of other organs. If so, from this hypothesis I must dissent, for the reason that the affections alluded to are found to exist as troublesome complications in nearly every case of chronic malady which comes under the care of a physician. It is pleasant to know that this rule, like most others, has its exceptions; and all those who are fortunate enough to belong to this class must bring their observation, rather than their experience, to bear in judging of the correctness of my statement. All physicians having a large practice will certainly agree with me. With this brief introductory paragraph I will proceed at once to perform the promised labor.

Paralysis.

This common disease has been robbed of half its terrors by recent discoveries in therapeutic electricity. Not many years ago, a person attacked with it felt that he was a doomed cripple for life, unless nature could prove itself sufficient to overcome the disease and re-

store to the affected or obstructed nerves harmony of action. The remedies of allopathic practitioners never have and cannot now cure paralysis, but in the hands of a skillful electrician and physician, this disease becomes as yielding as most other forms of chronic complaints. Nor is it for want of a proper knowledge of its pathology that the "regulars" are so uniformly unsuccessful in its treatment. Dr. Hooper very correctly defines it as follows: "It may arise in consequence of an attack of apoplexy. It may likewise be occasioned by any thing that prevents the flow of the nervous power from the brain into the organs of motion; hence tumors, over distention, and effusion often give rise to it. It may also be occasioned by translations of morbid matter to the head, by the suppression of usual evacuations, and by the pressure made on the nerves by luxations, fractures, wounds, or other external injuries. The long-continued application of sedatives will likewise produce palsy, as we find those whose occupations subject them to the constant handling of white-lead, and those who are much exposed to the poisonous fumes of metals or minerals, are very apt to be attacked with it. Whatever tends to relax and enervate the system, may likewise prove an occasional cause of this disease."

The same writer also correctly describes the symptoms preceding and occurring with an attack. "Palsy usually comes on with a sudden and immediate loss of the motion and sensibility of the parts; but, in a few instances, it is preceded by a numbness, coldness, and paleness, and sometimes by slight convulsive twitches. When the head is much affected, the eye and mouth are drawn on one side, the memory and judgment are much impaired, and the speech is indistinct and incoherent. If the disease affects the extremities, and has been of long duration, it not only produces a loss of motion and sensibility, but likewise a considerable flaccidity and wasting away in the muscles of the parts affected."

Notwithstanding the pathology of the disease is generally understood by all experienced practitioners, only those who have deeply investigated the science of electricity in its application to diseases of the human system, are at all successful in curing it. Many of the prescriptions of old-school practitioners tend to perpetuate and produce rather than relieve it. Cupping, blistering, and the administration of nux vomica, opium, etc., are often attended with injurious results.

There are four species of paralysis, viz.: "*Paralysis partialis*, partial, or palsy of some particular muscle; *Paralysis hemiplegica* palsy of one side longitudinally; *Paralysis paraplegica*, palsy of one-half of the body, taken transversely, as both legs and thighs; *Paral-*

Fig. 144.

PARALYSIS OF THE FACIAL NERVE.

ysis venenata, from the sedative effects of poison;" all of which may be permanently cured in their early stages, and frequently when far advanced. In young people, paralysis of many years standing may in a majority of cases be removed by proper treatment. Many invalids suffering with this disease lose confidence in the curative powers of electricity by a misapplication of the element. No definite rule can be laid down for the use of an electrical or electro-magnetic machine, which will apply successfully to all, because the application must be varied in time and direction of current with the peculiarities of different cases. Besides, paralysis may be, and often is, produced by humors or tumors gathering around or pressing

against the nerve or nerves, and in these instances the blood must be treated with skillful medication at the same time electricity is being administered. A little nice discrimination, with a proper understanding of appropriate remedies, is sufficient to overcome almost every case of paralysis. (For treatment, see page 574.)

Cancer.

Comparatively few years have elapsed since cancer was considered by the medical profession generally an incurable disease, although the rude men of the forest have ever exhibited masterly skill in its management, by using such remedies as are abundantly furnished in their wild abodes. Twenty or thirty years ago it was common to see invalids suffering with this terrible disease, making pilgrimages of one to five hundred miles, to Indian settlements, for the purpose of obtaining that relief which only the unlettered red man, with his instinctive knowledge of the medical virtues of roots and plants, could administer. Since then many liberal-minded members of the medical profession have become acquainted with the valuable secrets so long and exclusively known to the aborigines, and still but a few compared with the number who practise medicine, because of the opposition of a great portion of the educated members of the profession to every thing which has not been taught in the schools. Hence while liberal-minded physicians have gradually adopted the means suggested by the intuition of the unlettered Indian for the cure of cancer, the more bigoted are content to adhere to caustic and the knife, notwithstanding the well-known failure, in most instances, of these really cruel, because insufficient, weapons for combating the disease. The fact should be widely published, and when merely suggested will be comprehended by every intelligent mind, that when the human system is in a condition to produce a cancerous tumor, it is not in a proper condition to be lacerated with any medicine or instrument whatever. True, there are exceptions to the rule, and these exceptions, few as they are, encourage the surgeon and patient in undertaking the removal of the dangerous intruder by operations at once hazardous, painful, and usually unsuccessful. I have in many instances, as I fully believe, saved the lives of cancerous invalids who were just about to undergo surgical treatment, by saying to them—"First, have your blood thoroughly

renovated and the recuperative powers of your system placed in a condition to rally readily from the operation; this may cure your disease and render the use of the knife unnecessary; if not, then you will be in a better condition to survive the effects of the wound which excision must inflict." I remember only one instance in which this advice was accepted and carried out, that my medicine did not cure without final resort to the knife, and in that one I considered the case nearly hopeless at the outset and expressed that opinion frankly to the patient and his friends at the first interview. A surgical operation, performed when his general health was in a better condition to rally than at the time when he first became my patient, proved speedily fatal.

Various cancer salves and plasters have been concocted for the cure of this dreaded disease. I have, during my practice, purchased, in some instances at considerable expense, receipts of this description, which had been made quite popular by the alleged success of those using them. I paid one hundred and fifty dollars for the last one, and shall not pay fifty cents per dozen for any more, for two reasons: 1st, Because I have come to the firm conviction that cancer, when curable, can only be successfully treated by removing the poisonous properties of the blood which produce it. 2d, Because I find that all the secret salves and plasters which are supposed to be such "remarkable discoveries," possess caustic properties, little if any better in their effects than are found in the remedies commonly used by the regular profession. In every instance I have been disappointed when made acquainted with their ingredients, so much so that I have not employed them in a solitary case, and think I have good reason to believe that my success with my own remedies has been greater than it could possibly have proved if I had used them. The knife and the application of caustic salves or plasters are objectionable in every case that has not reached the stage of an open discharging sore, and when the disease has proceeded thus far the case is seldom curable. Excision or caustic precipitates this stage unless it proves a cure. So soon as the tumor, be it large or small, begins to suppurate, the exposure of the ulcerous matter to the air imparts to it greater acrimony or, perhaps I may say, rottenness. Meanwhile, the absorbent vessels take up large quantities of it, and send it through the circulatory system to every part of the body. At this juncture the general health indicates more rapid decline, and the invalid is actually

poisoned to death by the putrid emanations of a cancerous ulcer, only a small portion of which is discharged outwardly. There are many kinds of cancer, all of which, however, are manifestations of *one* disease, having its seat in the blood. The form in which it presents itself is governed by the idiosyncrasy of the patient. Of many individuals having a cancerous humor in the blood, one will have what is called a rose cancer, which looks at first very like a rose-bud and, as it enlarges, opens and expands like a rose. This generally attacks some glandular part, the breasts or ovaries of women or the testicles of men, or glands of the neck of persons of either sex, or it may present itself in any other part of the system. In its advanced stages it is very painful and often attains an immense size. Another will have a spider-cancer which takes its name from its close resemblance to the spider. There will be noticed in this form of the disease a prominence of small size, often not larger than a pin's head, of a dark or purple color, with roots spreading out like the legs of the insect after which it is named. When it reaches its full size, twinging pains are felt, starting at the centre and following the course of the roots. The painful stage is often preceded by a sense of itching and smarting. Another, a fissure cancer, a dry crack or cut in appearance, which hardens the flesh around it, and increases by deepening its cavity and rendering inflexible the fibres or tissues within which it is seated; it is most liable to attack the little depression in the lower lip; smokers of pipes and cigars are more subject to it than other people. Another may have a bone cancer, which is surrounded with rings hard as bone itself; and which, when fully developed, discharges matter from its centre of a peculiarly offensive character. It penetrates deeply and eats the flesh away rapidly after it begins to suppurate. Another, a wolf cancer, which is so named because of its remarkably destructive character. When very small it commences to eat away the parts wherein it is located and its ravages are attended from the first with excruciating pain. Another will be attacked with sleepy cancer, which consists of a growing tumor, attended with little or no pain till it becomes very large, when all at once its victim becomes an intense sufferer. When it has so far progressed as to cause the patient much pain, it is difficult of cure. Another will be likely to have a scaly or a bleeding cancer: the former an itching, burning, scaly sore, which eventually becomes ulcerous; and the latter a red and fiery tumor, attended with bleed-

ing and violent pain. Thus, the same disease manifests itself differently in different persons. The foregoing nosology of cancer is rather more red-manish than professional, but is better than the "lights of the profession" have yet concocted, because each name, Indian-like, indicates the peculiar character of the affection it designates.

Cancer, like an heir-loom, is handed down in some families from generation to generation, unless the current of impure blood is changed from its hereditary character by the skillful man of medicine. Scrofulous and syphilitic people are liable to be attacked with it; ulcerous affections of the womb often terminate in cancer of that organ. The sting of an insect sometimes produces a cuticular prominence which may develop a cancerous tumor in persons having acrimonious blood impurities. Every person having a tumor, large or small, should have it treated as soon as discovered, whether it possesses cancerous characteristics or not, for it may, if neglected, lead to this dreaded affection.

In their incipient stages cancerous tumors are easily disposed of. The writer has cured scores of them by resorting to those remedies which have rendered the medicine-men of the forest so eminently successful; but the farther the disease is advanced, the more difficult becomes the cure, and no one affected with it should waste time in doubtful experiments, indulging in the happy belief that the skillful physician can arrest its ravages in its later stages if less thorough treatment fails at the outset. Those having a cancerous ancestry should not wait for the local manifestation of the family malady, but should avail themselves of such constitutional treatment, as they may have confidence in, to expunge from the system all possible seeds of the disease. Those having supposed cancer or known cancerous predisposition may consult the author, in answer to the questions on page 583.

Salt-Rheum.

I would not devote an essay of even this brevity to salt-rheum, except for the fact that it is popularly regarded as a distinctive disease. In reality, salt-rheum is not a disease. It is only the effect or symptom of disease. It is a name for one kind of *scrofulous* eruption, and the best medical authority so regards it. Many per-

sons subject to it imagine that if they can only get some wash which will remove it from the skin the difficulty will be cured, not thinking that they are simply driving it from the surface to some internal part which will suffer more than the skin by its presence. In thus treating it the humor is almost sure to attack some portion of the inside skin, called the mucous membrane, so that it is only transferred from the surface skin to that which lines the throat, lungs, stomach, and other cavities, in consequence of which pulmonary, catarrhal, or dyspeptic affections follow. The only safe treatment for it is that which will eradicate the disease, and the disease is *scrofula*. External treatment alone is absolutely dangerous. (See essay on Scrofula.)

Spinal Curvatures

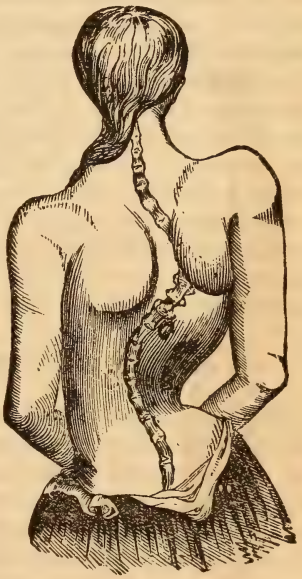
Fig. 145.

NATURAL SHAPE OF THE VERTEBRAL COLUMN.

Are curable or incurable, according to their nature and the age of the patient. They are almost invariably caused by an impure or weak state of the blood. Scrofula, one of the worst forms of blood disease, is the most frequent cause of weak or deformed spines. It is apt to attack the spongy texture of the vertebræ, and induce suppuration which soon destroys the fine net-work of muscles sustaining the ingenious structure. In speaking of this form of the disease, Dr. Syme remarks as follows: "When the pus ceases to be confined near the bone, and begins to drain away from it, the patient generally experiences great relief from his complaints. The pain becomes very much lessened, and the use of his limbs is often, in some measure, or altogether regained. But this amendment is usually accompanied by a serious change to the worse in another respect, since the vertebral column is apt to bend under its superincumbent weight when weakened by the destruction of bone and intervertebral cartilage which attends the suppuration. The curvature in this case takes place forward, and being confined to a small extent of the spine, causes an acute projection behind, so that one or more of the spinous processes appear to be dislocated backward.

This change of shape does not take place either when the extent of the disease is small in proportion to the size of the bones in which it is seated, or when it is so great that the patient is constantly confined to the horizontal posture; but the latter circumstances are comparatively rare in proportion to those which favor the occurrence of curvature. The surface of the abscesses either heals with approximation and consolidation of its parietes, the vertebræ concerned appearing as if run into one mass, or a state of caries remains, and gradually wears out the patient's strength." Spinal disease of this nature is often curable in children, but it is a difficult and almost hopeless complaint in those of adult age. The treatment must be such as will cast out the scrofulous humors, and only in this way can the progress of the disease be arrested. An invalid thus affected, even far advanced in life, may be greatly relieved, and have his days upon earth lengthened by the use of such remedies as will purify and nourish his blood.

Fig. 146.



DOUBLE CURVATURE.

Spinal curvature often arises from weak and innutritious blood, or, as is more commonly expressed, from general debility. When the muscles which maintain the vertebræ in their natural position become weak and relaxed because of a want of proper nourishment from the blood, curvature is likely to result. The position of the spine in double curvature is represented in Fig. 146. Here the spine bends both to the right and the left, throwing up the right shoulder and hip and depressing those of the left. I have frequently cured cases of this kind by electrical, mechanical, and medicinal remedies; and it is only by a union and skillful application and administration of these that a cure can be effected.

Notwithstanding curvature originates in an impure or debilitated

state of the blood, as before remarked, an immediate cause is usually traceable. In scrofulous cases, I have already shown that suppuration destroys the props which sustain the vertebræ and sometimes the vertebræ themselves. But in such cases as arise from weak blood or debility, bad positions in sitting, standing, or lying are the active or immediate causes. Lounging in a half horizontal position with the entire weight resting on the elbow, is bad for weak spines. By a frequent repetition of such a position by weakly and delicate persons, the spine will lose its natural form, and become curved. Many young women exhibit this deformity by a depression of one shoulder and an upward projection of the other. When discovered by themselves, corsets, shoulder braces, and other mechanical means are resorted to, to conceal the deformity, and although they frequently succeed in this, their muscular system becomes still more relaxed in consequence of artificial support, so that when divested of these things the spine exhibits far greater distortion. No mechanical remedy should be used in these cases, unless accompanied with such medical and electrical treatment as will restore the system to its wonted strength, for it is useless to endeavor to remedy effects so long as causes remain, and in spinal deformity it is worse than useless. If produced by scrofula, that humor must be eradicated before a cure can be permanently effected; if by debility, the blood must be increased in quantity and quality. For treatment, see Chapter XIII.

Scrofula.

Here the medical axe-man strikes the root of fully one-half the ills that afflict mankind. What is scrofula? I reply that it is a poison as imperceptible to the human vision as air. You cannot see air, but when in motion you observe its effects in the flutter of the leaf, the waving of the grass, or the snapping of your hat-band. Then, too, you feel it when, on a warm day, it dries the perspiration on your brow, or in winter when it makes your eyes water, and your ears whistle. You cannot see the insidious poison called scrofula, but you can see its effects upon the blood when it melts the white corpuscles and gives them a cheese-like appearance, and imparts to the red corpuscles a ragged outline and a fiery or inflammable property.

Air is not noticeable except in motion, and scrofulous poison is not

perceptible unless active. In its hereditary transmission it may often be observed in grandparent and grandchild when it does not exist apparently in the intermediate link that connects the two—the parent. The poison in many cases is kept in subjection by the strong recuperative powers of the individual; these powers paralyzed, by great exposure, excessive toil, grief, or dissipation, and the sleeping visitor awakens to a knowledge of the changed physical condition, and forthwith asserts its supremacy, just as a revolutionary element in a government, when the latter becomes weak, rises and seizes control. Thus it often happens that a grandparent by exposure and over-work, has exhibited marked evidence of a scrofulous diathesis; the parent of this line of descent under more favorable auspices and with temperate and studied habits, passes through life apparently free from it; while the child of this parent by sedentary occupation, irregular habits, trouble, or dissipation, is crippled by the distemper.

Physicians cannot tell any one exactly what scrofulous poison is composed of; nor can the chemist tell you precisely what fire is made of. You see the fire burn, and witness with wonder the rapidity with which it demolishes a stick of wood that you worked away upon with axe in hand till the perspiration rolled off your face. It laughs at you with its flickering flames while it reduces the tough fibre to impalpable powder. You may, if you will, see how scrofulous poison can take hold of a man whom "your big brother cannot whip," and melt away the substance of his blood, relax his muscles, crumble his bones, and make him as limpsy as a rag-baby. We know what will quench fire, and the doctors—some of them—know what will destroy scrofula. We also know many of the ways in which scrofulous poison is contracted. Living on the northern or western slopes of high hills or mountains, where the magnetic rays of the sun fall only a few hours of every twenty-four, may in a few generations, if not in a few years, render the inhabitants thereof scrofulous (see pages 259 and 358). A long residence in damp localities, habitually sleeping in chambers where the sunlight seldom penetrates, daily exposure to cold, damp air, insufficient food, a pork diet, impure air, and personal uncleanliness may induce it. I have already spoken of its hereditary transmission. It may also be contracted by impure vaccination (see page 190). The late Dr. Byrd Powell, after twenty years or over of careful observation, decided that it generally presented itself in the offspring of healthy parents who had disre-

garded the laws of adaptation in contracting marriage. Finally, vitiated and dissipated habits, and all influences which have a tendency to depress the vital forces may open the doors of the system to the devil's breath and inaugurate scrofula.

Scrofula is a peculiar distemper, and is more various in its effects than any other. It may attack the cuticle and cover it with blotches, pimples, pustules, or ulcers ; it may enter the glands in any part of the body and make them lumpy or tumorous—nearly all swellings or enlargements of the neck are of a scrofulous character; it may present itself in the mucous membrane and cause sore throat, catarrh, bronchitis, consumption, dyspepsia, and ulceration of the bowels. It may cause ophthalmia and blindness; ulceration of the ears and deafness; it may penetrate the bones anywhere and crumble away the osseous frame-work, causing spinal deformity, crooked limbs, protuberances of the breast-bone, and displacement of the hip-joints. There is no disease that has so much power for mischief.

The writings of medical men are singularly conflicting with regard to the atmosphere best suited to scrofulous persons. Some unqualifiedly condemn mountainous air, because goitre and other external manifestations of the disease are more frequently observed in a mountainous, high and dry atmosphere, than in regions where it is warmer and damper. This deduction is partly due to the influence of the northern and western slopes which necessarily exist wherever there are southern and eastern slopes. Others favor mountain air, and cite as evidence in favor of their opinion the greater frequency of tuberculous consumption in warm and changeable climates. Now, so far as the prevalence of scrofula is concerned, I do not believe that there is much difference between a cold and dry and a warm and changeable climate for its development, for in the latter we can find enough consumptives and others affected with internal scrofulous deposits to offset those in the former who have the external manifestations of the same disease; but, I contend, there is a decided choice between the two, for in a warm, damp, and changeable climate, in which there is always a preponderance of electricity, the electrical radiations from the system are sluggish, predisposing the humors to locate internally on the delicate mucous membrane of the head, throat, lungs, stomach, etc. A mountainous, dry, and negative atmosphere, if sought on the healthful slopes, by accelerating electrical radiations predisposes the disease to locate externally (see page

99). Now, who would not rather have goitre on the neck, an ulcer on the limb, or salt-rheum on the skin, than an internal tumor, ulcers in the lungs, or humors in the stomach? The false theories of medical writers concerning this disease and the climate best adapted to it, are owing to their ignorance of the philosophy of insensible perspiration, or electrical radiation. A dry, uniform climate, whether hot or cold, and a location having a southern or eastern exposure, are best suited to prevent the more dangerous development of scrofula.

Scrofula is regarded by many physicians as an incurable disease, and many of the victims of it settle down into the same belief, after having been drugged by a score or more of doctors of diplomatic and charlatanical schools, all to no advantage. Seldom am I applied to by a scrofulous invalid who has not been an extensive patron of medical men, and whose confidence in the curability of the disease and the skill of physicians has been nearly exhausted by repeated trials of different systems. Under the old-school treatment, he is the victim of antiquated dispensatory prescriptions; under the new school, a victim, too often, of absurd experiments. But in justice to the medical men of the new school it should be said, that when cures occur they are the authors of them. I never knew of a case of scrofula being cured by allopathic treatment, but have met many in which the disease had been made more troublesome and obstinate thereby. The common so-called remedies simply allay the fermentation in the blood, which is usually found to be going on where the poison is active. They act upon blood fermentation very much as alcohol does upon vegetable fermentation, for the moment subduing it; but as the evaporation of the alcohol allows the fermentation to recommence in the latter case, so does the passing off of the influence of ordinary remedies allow scrofulous fermentation to start up again.

To radically cure scrofula, the patient must have plenty of fresh air, sunlight, a strengthening diet, composed mainly of the best class of animal food (always omitting pork), and at the same time follow up persistently such a blood-purifying system of vegetable medication as may be prescribed by a skillful physician, who takes into account all possible complications and constitutional peculiarities. During the last twelve years of my practice I have found no difficulty in successfully treating scrofula, and have cured hundreds

of cases which had barely escaped with their lives from the hands of old-school practitioners and patent-medicine manufacturers. It is usually the custom of scrofulous invalids to take to patent medicines when they have exhausted the skill of the "faculty," mistakenly supposing that any medicine prepared for the blood will be of service to them. But the "one cure all," may not only be inadequate to affect the disease, but unadapted to the temperament (see page 155), in which case injury instead of benefit is received. In the treatment of no disease is it more necessary to consult the temperament of the patient, than in that of the disease under consideration. Scrofulous readers desiring to consult the writer are referred to the questions given in the next chapter on "Treatment of Disease."

Syphilis.

Syphilis is own cousin of scrofula ; it is the offspring of scrofula ; and, in turn, it becomes the mother of scrofula. A very mixed relationship, to be sure, but it may be clearly shown to exist.

Syphilis may be called the cousin of scrofula because the former is the offspring of vice and the latter the child of ignorance ; and further because the two possess the marked characteristics of consanguinity. The physical effects of one, in many respects, resemble those of the other. When the world progresses to a certain stage of enlightenment, the masses of the people will know how to avoid scrofula, and the hereditary stock which is now circulated in the veins of many respectable and enlightened families will be eradicated. When the world reaches a greatly desired and long-prayed-for era of virtue, then the public factories of syphilis will be closed, and the hereditary stock will be consumed by the discoveries of science.

Syphilis may be called the offspring of scrofula, because the latter is in many instances one of the parents of the former. Scrofula, personal uncleanliness, and sexual excesses, may *produce* syphilis. It is the popular belief that there is a stock on hand of syphilitic poison which has been handed down through all generations for the punishment of those who indulge in licentious habits and patronize the harlot. This is not wholly true, for the disease is being generated daily, and at times breaks out in quarters where there is reason to believe the married pair have been guilty of only uncleanliness and excess. Scrofula in the wife may attack the vagina and induce an

acrimonious leucorrhœa; this unwholesome secretion by neglect may become irritating and poisonous; then sexual excess need only be added to cause in time the development of a pustule or cluster of sores on the male organ; this local affection of the male acquires additional virulence when it reaches the stage of suppuration, and brought in contact with the vagina adds fuel to the fire existing in the female organs; in a little while a disease is produced so much like that found in the abode of the courtesan, that the physician is unable to discover any very marked distinction in the symptoms nor the patient any appreciable difference in its effects. Cases of this kind have come under my observation, wherein the parties affected had consulted various physicians, who pronounced the difficulty as unquestionably one of primary syphilis. Furthermore, the experiment has been tried in some of the venereal hospitals of Europe, of causing a slight abrasion of the glans-penis and then coition with a woman of a scrofulous diathesis affected with leucorrhœa, and in due time something entirely resembling chancre was developed. No one, of course, would be willing to be experimented on long enough to see how far the disease might be developed and disseminated. Consequently, experiment cannot well go further, but it has been carried far enough to show that the disease may be generated, with the aid of scrofula, and there can be no reasonable doubt that chancre thus produced and neglected would again affect a healthy woman by contact; and that only time, excess, and uncleanliness are necessary to develop a syphilitic infection equal to that which may be obtained at the lowest houses of prostitution. It is undoubtedly true that the most virulent form of this dreadful disease usually emanates from the dens of harlotry; but even here it is not always an imported poison. It is indeed often the product of the very place where found. It is commonly thought that it is carried into the house of prostitution by some horrid sailor or wicked traveler who has brought it all the way from the Sandwich Islands, from Asia, or from the bawdy-houses of Europe. Not so. There is probably as little imported syphilis as French brandy in New York to-day. It is *made* right here. It is the direct product of dirty, licentious men, and of filthy, unprincipled, and scrofulous women, and excessive venery between them. Women who for pay receive an unlimited number of men daily for weeks, months, and years, in time must become diseased; and the vagina which has received all this abuse be-

comes the seat of the disease, just as the stomach becomes disordered when it is habitually stuffed with all sorts of indigestible as well as digestible substances. If these women be scrofulous, one of the germs pre-exists, and their habits furnish the remaining ones necessary to produce a syphilitic distemper quite too much like the imported to be rated at all inferior in quality or effect. The dens of harlotry are therefore the hot-beds in which venereal diseases are germinated, and are not limited to mere agencies for their dissemination. When the women are not scrofulous or constitutionally inoculated by a previously contracted syphilis, their excesses generate gonorrhœa; but when they enter upon their traffic with hereditary or acquired scrofula, syphilis is the natural product of their avocation.

Syphilis becomes the mother of scrofula. This is the third and last proposition embodied in the opening paragraph of this essay. I base this statement upon the results of my professional observation. I am frequently called upon by those whose blood gives every evidence of possessing scrofulous poison, and whose affections present more of the characteristics of scrofula than syphilis, while the blood impurity can be traced directly to syphilis, contracted five, ten, or twenty years previously, or to a known syphilitic impurity existing in the parents or grandparents of this class of invalids. These cases have led me to the following conclusions: that some supposed remedies change the nature of syphilis, so that while it loses its resemblance to the latter, it assumes the character of scrofula; that whether by the effects of medication, the lapse of time, or the recuperative powers of nature, the syphilitic parasite ceases to exist, the virus which is left takes the character of scrofula.

What is syphilis? The microscope reveals the probability of its being a parasite. There is some dispute on this point, as the supposed infusoria are so minute as to be discovered with difficulty by the microscope. From my examinations I believe syphilitic matter to be alive with parasites. The origin of the disease as well as its peculiar character also favors this theory. It is produced by diseased vaginal secretions, promiscuous seminal excretions, and filthy accumulations, all thoroughly mixed and decomposed. Outside of the female vagina this conglomeration of decaying animal matter would breed vermin, and why not in the vaginal cavity? Parasites are generated in the cavities of the human body, as illustrated in the cases of intestinal worms. Although this question is worthy of

more than a passing paragraph, its consideration here is not important for the purpose of this essay, and to save space I must drop it with the few suggestions already made.

The characteristics of primary syphilis are presented in the chapter entitled, "Private Words to Men," and need not therefore be described here. Allow me to remark, however, that constitutional syphilis is sometimes contracted without being preceded by primary symptoms. Some of the absorbent vessels of the penis "accompany the blood-vessels and terminate in the plexus of lymphatics in the pelvis." The membrane covering the glands may be tough enough to resist the formation of chancre, while the absorbent vessels are active enough to take in the virus. In this case the circulatory system becomes poisoned without external notice or warning. In some cases, without chancre, the virus is carried by another set of absorbent vessels to the glands of the groin. When this occurs, the affected subject is at least warned by the swelling of the groin, a glandular enlargement, called by the profession bubo. Many suppose that they cannot become constitutionally affected unless bubo supervenes; this is not always true, as has been observed when speaking of the possibility of the virus being conveyed into the system without the exhibition of primary symptoms; I may also state, what is a well-known fact to all physicians familiar with this affection, that chancre may be presented without producing bubo and still leave the patient constitutionally affected. In a case of this kind the virus is carried from the chancre directly into the system by the absorbent vessels first mentioned, and is not taken up to any perceptible degree by those connected with the glands of the groin. When taken up in this way, or when absorbed without primary symptoms, the cunning enemy is ere long discovered with his accustomed coat, feather, and spur, ambushing about the throat or beneath the cuticle.

Some remarkable cases of syphilitic infection now and then occur, wherein the disease does not show itself for several years after exposure. This may be accounted for as follows: the parasite or the poison finds lodgment in a system, the recuperative powers of which are strong enough to keep the development of the disease in abeyance, and at the same time the disease is potent enough to maintain its silent foothold, until sickness or debility sufficiently impairs the vital powers to allow it to assert its ascendency, at which juncture all the marked constitutional symptoms make their appearance.

What are its constitutional symptoms? One of the most common of these is the appearance of copper-colored ulcers in the throat, which often work very actively in destroying the parts where they are located. Ulceration sometimes attacks the roof of the mouth and eats away the osseous portion between the mouth and nostrils; it occasionally takes a person by the nose, and by destroying the bone that divides the nasal orifices, lets that prominent feature of the face down to a level with the cheeks. Whether in throat, mouth, or nose, it generally imparts to the breath an offensive odor, and unless arrested by proper medication, deforms the face, impairs the powers of speech and the senses of seeing, hearing, and smelling, if indeed, it does not paralyze all the powers of the body by destroying life itself. In some cases the disease reveals itself with great shyness in a small ulcer in an obscure part of the throat, from which point it stealthily advances until it reaches the curtain of the palate, or "soft palate," as it is sometimes called. This organ affords an easy field for its operation and very soon disappears before its ravages, and through all the spongy tissues of the throat and mouth it spreads like a fire in a dry peat-bed.

Another symptom of syphilis is the appearance of copper-colored blotches on the skin, usually about the breast and arms, and not infrequently on the forehead. They become elevated by a thin fluid which evaporates, leaving a kind of dandruff which readily comes off by friction. In many cases months will pass with no more alarming indications of the presence of syphilis in the blood; but generally ulcers sooner or later succeed the blotches. Occasionally a case is encountered in which scales are piled one upon another an inch high, as if a horn was about being projected from the point where they are forming. All these external affections in time penetrate and decompose the flesh beneath them, causing very destructive suppurative sores.

Falling of the hair is still another symptom, although this may arise from other causes. When, however, the hair drops out badly after exposure to syphilitic infection, it is well to search out the cause, and see if it may not be reasonably presumed to result from the presence of the destructive taint in the system.

When syphilitic poison is contracted by a scrofulous person, or one who has been often salivated with mercury, it is like adding fire to powder, and the foregoing symptoms are not only more marked and

rapid in their development, but the bones are generally attacked; and where the bones are but thinly covered with flesh, as about the forehead, shins, and portions of the arms and shoulders, swellings appear which are called nodes. These tumors often have an apex almost as broad as their base, with the exception of a slight convexity caused by the swollen skin covering them. In some instances they are about the size and shape of half a walnut, supposing it to be placed on the bare bone and covered with the integument. If they reach the suppurating stage, that portion of the bone forming their base usually becomes carious and the invalid suffers great pain.

As a matter of course, rheumatism of a very obstinate character is often produced by syphilitic infection. Some constitutions are affected only in this way. In others, excruciating pain proceeds from something more than what can be called rheumatism. The bones become actually honey-combed, and in some instances crumble away and discharge their syphilitic lava through openings made in the flesh. The shin-bones are generally the seat of this form of the disorder.

There are those who profess to think there should be no remedies devised or administered for the cure of syphilis. Supposing the Almighty was so unmerciful, what would become of every one of us? Furthermore, what disease is there in the whole catalogue of physical distempers which does not proceed from our ignorance or our mistakes? Christ healed the lepers, and what were they but the victims of syphilis? The physicians have at last discovered that salt-rheum is one form of scrofula, and they will yet find that leprosy is one of the external manifestations of constitutional syphilis. Indeed in the first year of our Lord, long centuries before, and many after, the disease we now call syphilis was rampaging about without a name. It is unmistakably described in the Old Testament; Hippocrates, the founder of Grecian medicine, who lived B. C. 460, delineated a disease which was unquestionably the same; Avicenna and Aretus, the most celebrated of the early Arabian physicians, described the affection, attributed its origin to carnal connection with unclean females, and classed it with lepra. It was not till nearly the close of the fifteenth century that the disease was grappled by the European physicians, and held long enough to be labeled Syphilis.

The various schools of medicine do not agree as to the best means

of treating syphilis. The "allopaths," without apparently knowing it, have, since the days of their founder—Paracelsus—been treating it on homeopathic principles. Probably most of my readers are aware that the school of medicine called "homeopathy" teaches that "like cures like." In other words, the physicians of this school believe they are assisting nature when they give to the sick man, in small doses, what would produce a similar affection in a healthy man in extravagant doses. Well, now, mercury in the form of calomel, or otherwise, excessively administered, will produce a mercurial disease, the effects of which are very like those of syphilis. It will cause ulcers and sores, and rot the bones, and give pains to the muscles and bones, etc. This same mercury has been the great weapon of the allopaths in combating syphilis. Should they not be indicted for homeopathy—tried, convicted, and kicked from their school?

It is my deliberate opinion that the Syphilitic Era, as it was called, was precipitated by the prevalence of mercury as a remedy for disease. In the fourteenth century mercury was duly initiated into the family of medicine with pompous flourish by Philippus Aureolus Theophrastus Bombastus Paracelsus. It forthwith became not only a panacea for every thing in the hands of the disciples of Paracelsus, but it actually became a domestic medicine. It became a family drug, and was dispensed on all occasions when anybody had headache, corn, or stone bruise! The flesh and blood of all Christendom became poisoned with it, and during the fifteenth and sixteenth centuries syphilis raged so like an epidemic throughout Europe that that period has since been known as the Syphilitic Era. It is true that the disease took the form of an epidemic in Naples only two years after the birth of Paracelsus, but this may be accounted for by the fact that that city was at the time occupied by the French army; and it is universally true that where large armies are stationed the disease is liable to become prevalent; but its subsequent abrupt outbreak all over Europe, and at a time when mercury was the panacea for every ill, in my opinion, may be traced to the wide-spread use and abuse of that mineral. During that era all the nations of the civilized world called each other hard names for having originated the disease; but the real fact is, by their injudicious use of mercury they "sowed the wind and reaped the whirlwind."

As an auxiliary remedy for the cure of syphilis, on homeopathic principles, it may be admitted that mercury possesses some merit.

In my practice, however, I never administer it by the mouth and stomach. It may be applied locally to syphilitic sores; it may be externally administered in the form of fumes or vapors in baths; and it may be passed through the system in company with and controlled by galvanic currents. In no case is it indispensable. I have cured scores of cases with purely botanical remedies. As in the case of scrofula it is necessary to take into account the constitutional peculiarities of the patient and the complications which exist, and consequently the treatment must be varied to suit the emergencies of each individual case. Syphilitic invalids at a distance, when taken as patients by the author, are treated with the remedies adverted to on page 299; but in office practice, electrical and mercurial applications and baths are not infrequently prescribed in order to facilitate a cure. When taken in the stomach, mercury is accumulative, and the patient receives a new enemy to combat; after having vanquished syphilitic poison he is suddenly confronted with mercurial poison, which in many cases proves the more powerful foe. All the benefit that can be derived from this mineral, is available without recourse to its internal administration as medicines are usually given. A mercurial current of galvanism, or one possessing the disinfecting properties of the mineral, may be generated by the use of mercury in the preparation of the batteries; and in applying this peculiar agent the diseased system is simply visited by the mercurial current. Although the whole body is permeated with it for the space of thirty or forty minutes it is the spirit and not the body of the metal which is present; not one particle of the objectionable mineral is retained to corrupt the blood, but the aura which entered passes out in obedience to the law which governs galvanism in its transit from the positive to the negative pole, after having paid a telegraphic call to the various parts of the body.

When the primary disease is present, or when ulcers affect any external part in the constitutional form, mercurial fumigating baths are preferable to the electrical or galvanic. Just what is best to be done must be left to the judgment of the physician, but make a judicious choice, and do not employ one who has not had extensive experience in the treatment of the disease. Nearly all cases of syphilis are curable if wisely treated. Persons afflicted with this disorder, desiring to consult the author, are referred to page 583.

A Variety of Chronic Diseases,

Not yet mentioned, might, with profit to the reader, receive attention in Part II.; but this division of the work is already fully fifty pages larger than it was my original design to make it. A chapter on nervous disorders, and another on ordinary affections of the blood, would be read with interest by a very large class of sufferers; but the more prominent disorders proceeding from these physical disturbances have already received attention. Readers having nervous or blood derangements not specially alluded to in this work, such as Hypochondriasis, Hysteria, or Fits; Boils, Carbuncles, Scald Head, Tetter, Itch, or Pustular Affections; or those suffering from other chronic ills, such as Dropsy, Diabetes, Gout, General Debility, and infirmities of an uncertain nature, perhaps without name, are at liberty to consult the author by answering the questions on page 583, and by giving any additional information having a bearing on the case. While I am fully conscious that there is a time when every one must die, I believe, yea, know, that thousands are dying daily with old complaints, whose lives could be spared for years, to make relatives and friends happy, if they could but have the treatment of skillful physicians who devote their whole time, study, and practice to chronic diseases.

It is, indeed, surprising to see how many are contented to be made "comfortable" by the "family doctor" year in and year out, when resorting to treatment capable of removing *cause* or *causes* as well as *effects*, would render the weekly, monthly, or semi-yearly visits of the family physician unnecessary, the mind and body of the patient vigorous instead of merely comfortable, and life a prize rather than a questionable blessing. So accustomed are doctors, in acute practice, to prescribe for merely the relief of those who call them, and, generally, so well satisfied are patients when they receive relief, however temporary, this system of "patching up" is carried into the treatment of chronic as well as acute diseases by a large majority of medical practitioners. There is, therefore, a fact which every invalid would do well to recognize and profit by, namely: *causes* must be removed as well as *effects*, or permanent relief cannot be obtained. The physician who merely seeks to modify or relieve any pain, debility, or discomfort in chronic cases, is as foolish as the gardener would be if he should go through his garden, pruning off the branches

and leaves of the weeds he desired to exterminate, instead of planting his agricultural implements at their roots and removing them, root and branch, from the soil they impoverish. All chronic diseases have some deep-seated predisposing *cause*, and the pains and discomforts are but the effects of that cause. In many complicated cases, there are not only causes but *sub-causes*, or in other words one or more causes may produce certain affections which will produce still other disturbances. Now, in all these cases it is necessary, in order to obtain a perfect and unconditional discharge from the tyrant disease, to seek out all these causes and sub-causes, and apply appropriate remedies. In view of these considerations, I would say to the victim of disease, employ your family physician when you are on your back, if you please, but when you get on your feet again, and your physical troubles linger for weeks, months, or years, place yourself under the care of one who gives exclusive attention to chronic diseases, and who, by a thorough and nutritious system of medication goes down to the very root of the whole matter. Read the first and last chapters in Part II., the first commencing on page 331 and the last on page 574.

CHAPTER XIII.

TREATMENT OF DISEASE.

N this chapter of practical matter, will be thrown together, without any waste of labor in classification, suggestions of such importance to the invalid reader, that it is hoped every sentence will be perused with care and reflection. There are many truths, medical and moral, which the mists of ignorance, or popular prejudice, partly or wholly, shut out from the mental vision, and, inasmuch as the great mass of people know more of every thing else than they do of that which pertains to the laws of physical and spiritual health and life, and to a rational art of healing, it is not surprising that many dose themselves to death with their own uncertain concoctions; that thousands become the dupes of wicked charlatans; that tens of thousands allow themselves to become sewers for patent nostrums; and that millions are the patrons of a so-called scientific school of medicine, which cures (?) the sick by making them life-long cripples. I trust that a candid perusal of this chapter will serve to dispel these mists, or what might be properly called medical and moral fogs, for no harm can possibly result from an effort to impress upon the public mind the necessity of doing for the invalid the best that can be done at the very outset, instead of experimenting from week to week, and month to month, with something or somebody which or whom it is thought "will do," until the disease-burdened body nearly sinks into the grave embalmed with a thousand drugs.

With this brief prologue I will pass to the presentation of matter appropriate for this chapter.

Everybody His Own Doctor.

This is an attractive motto which graces the title-page, or gleams from the preface of many a medical work gotten up for the patronage of a too credulous public. It would be no less pleasing to the author than to the reader if, in this volume, instructions could be given, which would enable every invalid who peruses its pages, to treat his or her own case without the aid of a physician. Such a task, notwithstanding the assumptions of many to the contrary, would be simply impossible, as every one of genuine good sense must perceive. So much depends upon the constitution or the temperament of the sick man or woman (see page 156), only one who makes these idiosyncrasies his constant study, is capable of prescribing successfully, especially in the thousands of cases in which there is a variety of blendings or mixtures of temperaments.

If my system of practice were at all similar to that of physicians who make calomel or some other drug a favorite remedy for every disease, with only an occasional deviation, the task of instructing non-professional readers in the healing art—if art, in that case, it could be called—would not only be possible but easy; or if my system was like that of medical men who have a *specific* for every ill, and who would treat a dozen patients afflicted with one kind of disease in precisely the same way, then would it be but a pleasant pastime to sit down and instruct the world's sufferers just how to doctor themselves. But the attentive reader cannot have failed to perceive that I entirely disapprove of treating the sick on this "hit or miss" principle, and insist on the necessity of prescribing, not only for disease, but for constitutions or temperaments. Never, yet, has there been written for popular use, medical books in which prescriptions or recipes were given for the ostensible purpose of enabling the sick to treat their own diseases, that did not prove failures, and in a majority of cases, worse than failures, for the reason that they lead people requiring the best of medical skill and experience, to tamper with themselves till their diseases became incurable, or to employ active remedies (the nature of which they did not fully understand) when the complications contra-indicated their employment.

The chief aims of the author in placing this work before the public, are to give publicity to a volume of original ideas which he believes will be of advantage to the world; to exhibit to the reader the *causes*

of disease and social unhappiness, in order that the rocks and shoals which lie hidden in the turbid sea of life may be avoided; to impart to those possessing ordinary intuition, the ability to judge wisely of the merits of the various systems of therapeutics in vogue, and to put all on their guard against—not only the unjust prejudices and old fogyism of the "regular practitioner," but the impositions of the empiric. If I were writing this book for the exclusive use and benefit of the medical profession, it would be necessary to make it voluminous, expensive, and not a little obscure to the non-professional reader, for lengthy details in regard to the treatment of every case, with its many possible peculiarities and complications would have to be scrupulously given, the comprehension and appreciation of which would require the possession, on the part of the reader, of extensive pathological knowledge. I may yet make such a contribution to medical literature, but I doubt my ability to produce a work of this description, which would enable readers of little or no medical attainments, to act as their own physicians. Doctors will continue to be "necessary evils" till mankind for several generations, shall have strictly obeyed the laws of life and health; or, in other words, until disease shall have become an annoyer and destroyer of only those who have passed temperately through the spring and summer of life, and entered the closing winter of their earthly career; or, on the other hand, they will have to be endured until physiology, pathology, materia-medica, hygiene, and surgery become household sciences, taught, not only in all institutions of learning, but in the nursery and family; and then, as "practice makes perfect" in every art, profession, or trade, an invalid laboring under any difficult disease, would rather intrust his case in the hands of one whose sole labors are devoted to the relief of the sick, than in the hands of an artist, a lawyer, a parson, a merchant, a mechanic, or a farmer, however devoted a student he may have been in matters pertaining to the healing art. If a man possesses the necessary attainments and natural gifts to practise medicine successfully, every day's experience adds to his skill; every case upon which he attends, the better prepares him for successfully managing the next, and while his success extends his practice, his practice, in turn, augments his skill. "Every man to his trade," is an old adage, and in no sphere of life does it apply with greater force than to the physician.

None but those who are engaged in the practice of medicine with

eyes and ears open, can realize how complicated are nearly all cases of chronic disease. Seldom is a single organ or function involved; several affections usually co-exist, each of which aggravates the other, and any one remedy, which is favorable to the cure of one, oftentimes gives disturbance to the rest. In no such case can a single prescription affect, favorably, these combinations; nor can directions be laid down in a popular work, which will enable the invalid reader to go understandingly at work to concoct a set of prescriptions adapted to his particular case. But suppose such a plan practicable, then the adulterations practised in drugs and medicines, would put to hazard the reputation of a popular author (see page 194).

In this connection I may make a quotation which bears directly on the point last referred to in the preceding paragraph. While reading the proof sheets of the foregoing matter my attention is called to an article in one of our most influential city papers. The editor has been reading an *exposé* of the extent to which drugs are adulterated, in "The Journal of Applied Chemistry," published in New York, and, after presenting some startling facts, proceeds to comment as follows: "Hence the physician either increases the doses or condemns the drug entirely; or, should he fix upon the amount required by his experience in the use of such an article, and afterward obtain that which is pure, he will find his patient exhibit the symptoms of being poisoned. Nor is the adulteration limited to a few unprincipled dealers here and there through the country, but it is so general that the leading importers of drugs are aware of it; nor do they deny it, although it might be supposed that their interest lies in the concealment."

"In discussing the remedy," remarks the same editor, "it is said that too great reliance is placed on the manufacturer; for the apothecary seldom applies the proper tests to his purchases. We are informed, also, that it is no uncommon practice for clerks to put up a different drug from that named in a prescription, both to avoid the trouble of getting it elsewhere and to be sure of making a sale, and, in calculating the chances of escaping detection, they rely mainly upon the ignorance of the patient and the inattention of the physician. As an effectual remedy for these crimes and stupidities, our authority proposes that honest drug inspectors shall be appointed alike for large and small places; it shall be their duty to examine every invoice of drugs purchased by the retail dealer, and

also to do all in their power to prevent the druggist from 'sophisticating such drugs, or in any way defrauding his patrons.' In addition, what are called patent medicines should be sold with a statement of the articles of which they are composed, by which means it is thought that dishonest quacks will become obsolete; when the motto with regard to their preparations, 'Open your mouth and shut your eyes' will cease to have application. But the inspectors should critically examine all of this class of medicines; for it is charged that the proprietors are in the habit of buying damaged drugs, worthless for any other purpose, and they also use bad wines and alcoholic liquors in the preparation of 'invigorating bitters,' 'health cordials,' and the like. It is proposed also to forbid those who refine aloes to sell the dregs to brewers; nor may the manufacturers of quinine and morphine sell their exhausted bark and opium to druggists, for, we are told, 'they will invariably dry and pulverize these articles, and use them for the adulteration of genuine drugs.' As to wines and liquors, none must be allowed to be sold for medical purposes unless they have the stamp of approval of the inspectors."

"It must be confessed," continues the same writer, "that this is an alarming exhibit to such as take medicine and beer. But it does not seem likely that the proposed examination will effect the desired object, since it will be easy for any druggist to keep on hand samples for inspection other than such as will be sold. If we look deeper and further, it will be seen that the trouble arises from an adulteration of quite another kind, and, in our opinion, no remedy can be found until one is applied to this. We refer to the adulteration of human nature; for this is a necessary preliminary, not only to the adulteration of drugs but of food, and of every commodity from which money by this practice can be made, In the same journal from which we have quoted, a certain firm advertises with large heading, 'Pure White Lead,' and they add, in a sort of postscript, that they also manufacture a special article equal to that produced by any other establishment. The inevitable tendency of this wide-spread debasement is to destroy the moral sentiment in man; and there seems no hope of reformation until fraud and rascality pervade society to such an extent that the social structure breaks down with the weight of its iniquity, when the world will begin again."

The foregoing, from a disinterested source, presents a stronger inducement than the author can modestly offer, to induce invalids to employ only those physicians who prepare the remedies they dispense; and who, by so doing, have opportunities of judging correctly of the therapeutic value of the medicines they propose to administer. Self-interest and reputation, if no nobler motive, inevitably prompts physicians of this class to labor diligently to avoid the evils of adulteration. Here there is no divided responsibility. The failure of a prescription cannot be laid to the incapacity, dishonesty, or carelessness of the druggist.

In the first edition of this work, I proposed to furnish written prescriptions on the reception of a full description of a case, but I soon found myself compelled to abolish this plan, for, notwithstanding my almost uniform success in the treatment of cases wherein I prepared and supplied medicines myself, those to whom I furnished written prescriptions did poorly indeed. This was chiefly owing to the fact that drug and botanic stores, almost everywhere, are more or less stocked with stale and adulterated herbs and roots, which are worthless, in consequence of having been kept too long, or mixed with inferior species; or with those which had been gathered at the wrong season of the year, before their medicinal properties had matured, or after the changes of the season had destroyed them. Many persons whom I have employed at the proper seasons of the year to collect such things as I need in my laboratory, have made it their business out of season to gather for the market. Furnishing prescriptions, however, was more practicable at that time than now, for the reason that many of my processes of preparing medicines are entirely changed. Some of the processes are original, so much so that the apothecary could not well prepare the remedies if the prescriptions were given. Aside from these considerations many cases require electricity in some form.

Inasmuch as many who read the common-sense theories advanced in this book, will desire to avail themselves of the system of treatment they naturally suggest, I will say that if invalids at home or abroad (see Questions to Invalids) will give me the opportunity of doing for them as each individual case seems to require, I can treat such as I may be willing to undertake with confidence of success. Invalids under my treatment are not restricted in diet or exercise; and those who are able to pursue their business, can do so without

any interruption from the effects of the medicines, which will only the better enable them to follow successfully their vocations. This, to the business man, is an important consideration. Such being the debilitating effects of most things bearing the name of medicine, it is not singular that those who have a business or profession requiring their personal supervision, feel that they must live and suffer on till death ends their infirmities, rather than adopt any system of medication. My mode of treatment does away with this objection, for I do not "tear down to build up," nor are the medicines I administer usually unpleasant to the taste. I give *nutritious* instead of *drug* treatment.

Dietetics.

With regard to dietetics, I should perhaps remark that I do not mean by any thing said in the closing portion of the foregoing essay that invalids can always eat just what a vitiated appetite may call for without injurious consequences. There are many kinds of food which only the strongest stomachs can digest, and these, it is palpable to every mind, should be avoided by the invalid whether the digestive organs are impaired or not. But it would hardly seem necessary for a physician to advise an invalid to abstain from warm bread, mince-pies, rich pastries of every kind, pork, cucumbers, boiled cabbage, and such edibles as are doubtfully wholesome for healthy persons. My injunction to the sick is—*eat only such food as seems to agree with you*, and *that which distresses you, avoid.* Perhaps some dyspeptic will say: "Why, Doctor, all kinds of food distress me." To such I would reply, you know something of the digestible qualities of the food set before you, and from it you must select that which is the most nutritious, and inflicts on your stomach the least disturbance. This is a good rule to observe, and may beneficially take the place of those starve-to-death dietetic prescriptions so often given by physicians of Grahamite proclivities. The system tottering under the burden of chronic disorders, much more than the healthy body, needs nutrition, and nothing can be more foolish than to weaken the healing powers of nature by the adoption of a system of starvation.

Clear Conscience Better than a Petted Stomach.

It seems to me that those physicians who direct so particularly in regard to the taking care of the stomach, would do a better thing if they would take the same amount of pains to impress on those un-

der their treatment the necessity of keeping the conscience clear. An overloaded stomach will not half so much depress the physical health as a sin-loaded conscience. I have already spoken in various portions of this book, of the influence of the mind on the body, and it may be set down as an absolute fact, that if a sick man or woman is daily doing things which he or she believes to be wrong, the regrets which follow cannot fail to seriously aggravate whatever physical trouble may exist, while cheerfulness, or, at least, an undisturbed mind, greatly aids medicaments in effecting cures. If we may "laugh and grow fat," it is reasonable to suppose that by being at peace with ourselves, we may with proper remedies to assist nature, find relief from bodily infirmities, if curable at all.

I may be asked, "What do you mean by a sin-loaded conscience?" I answer, a conscience harassed by the commission of acts which you believe or know to be wrong. I do not intend, in this place or in any other, to don the robe of the theologian. I am a physiologist and physician, very little acquainted with theology. This volume will undoubtedly fall into the hands of Protestants, Catholics, Swedenborgians, Jews, Mormons, Deists, Atheists, Pantheists, and it may possibly be read by Mohammedans, Simonians, Supralapsarians, and may not impossibly find readers among the Jumpers, Whippers, Diggers, and others of the more eccentric class of religionists. Hence it would be useless to require my patients to conform to any particular standard of morals or creed in religion; but I can, without questioning the correctness of any one's religious opinions, insist on their living up fully to their highest conceptions of right; to their living at peace with themselves and the inward monitor. Though an act may not, in itself, be wrong, it should not be committed by one who *thinks* it wrong, for not only does unhappiness follow in the wake of such conduct, but the effect on the moral sense is precisely as bad as if it were an actual wrong, and it opens the way for the perpetration of the latter. In other words, persons may become heedless of the dictates of conscience by doing what they think they ought not to do, and in the end, actual as well as supposed sins are committed, while in either case remorse usually succeeds, and depresses the physical energies no less than the spiritual complacency. It is therefore properly within the province of a physician to insist on correct moral deportment on the part of the patient, as well as to direct in regard to diet, doses, etc.

I am often told by invalids consulting me, that they are distressed with doubts on religious subjects. Now, there is no good reason why any person should keep his mind in painful commotion because he cannot square his faith and belief with that of his neighbor. So long as people's brains differ in shape and size, so long will it be difficult for them to think alike, and no one should allow himself to become distressed because he cannot put on his neighbor's opinions any more than he should weep because he cannot put on his neighbor's hat, coat, and boots. To all such I say, live true to yourselves and the light you possess. Do just as you think you ought to do. Cultivate your understanding and your conscience, and be guided by both. If at any time you doubt the correctness of any opinion or creed you have long cherished, investigate cheerfully and carefully, and if a Christian—prayerfully, but not painfully and impatiently; then leave the result with a merciful Providence.

It is really more important that the mind of a patient should be free from distress than that the stomach should be free from the presence of unwholesome food. A sin-loaded conscience has brought many a stalwart man upon a sick-bed, and it is useless to try to conceal the fact that it preys heavily on the remaining energies of the sick. I have thought proper, in another part of this volume, to present an essay on "Violating the Moral Nature," for the purpose of showing the effects of outrages of the moral sense on the nervous and vascular systems, for as the inner suffers with the outer man by the violation of physical laws, so does the outer suffer with the inner man by the violation of moral laws.

With this view of the matter, I would say to my patients, be just as particular in not overloading or offending your conscience as in not overloading or offending your stomachs. I cannot tell you just what you can or must believe; neither can I tell you just what you can or must eat. I can confidently assure you that you must not lie, cheat, steal, nor murder; that you should not eat pork, warm bread, rich pastries, nor shingle nails; but there are thousands of practices which you may or may not pursue, according to the condition of your consciences and stomachs that may or may not inflict physical pain. As your physician—not your parson—I advise you *to do nothing you believe to be wrong; eat nothing which seems to distress you.* So far as a life of honesty is concerned, I would advise no one to live so, merely because honesty is the best policy. This object

is too groveling—too mean. It beclouds and finally drenches out an ennobling attribute—the soul of honor. Horticulturists who look at the delicious fruits protruding singly or in clusters from out the rich foliage of trees and shrubs with merely a calculating eye—estimating how many bushel-measures it will fill, and how much per bushel it will bring in the market, do not draw inspiration and moral and physical elevation from the beauty and fragrance which delight the senses of one who sees in it the generosity and infinite creative power of a Supreme Father. So with business men, and all others who esteem honesty as the best policy, and pursue it simply for the purpose of gathering up more dollars and cents; they do not experience those morally elevating and health-inspiring emotions which thrill the bosoms of those who live honorably because they love their fellow-men and the Father of all—because they delight in dealing justly with all mankind, and aspire to perfect manhood. Depend upon it there is a mine of health which reveals itself to all who live true to God, true to humanity, and true to themselves.

Invalids must not be Impatient.

Time is required to cure chronic diseases, and nothing is gained, but rather something is lost, by the use of what are termed immediate remedies. Ignorance of the fact, or a disregard of it, is the cause of failure with many (so-called) skillful practitioners, who, knowing the impatience of the invalid to get well at once, try to cure in a week or two, diseases which have been for months and perhaps years, accumulating in the system. My injunction is, have *patience*—take *time*—and I will give to those who place themselves under my care, treatment which will cure *causes* as well as *effects*, and at the same time be of no more trouble than the regular meals and sleep, while it works silently in the system, arousing the healing power of nature, and aiding it in regulating every diseased condition of the mental or physical organization.

Questions to Invalids.

1st. What is the color of your hair and eyes, and what your complexion? Age? Are you tall, average height, or short? Are you fleshy, plump, or lean? Is your neck long, average length, or short?

What is your present weight? What your weight when in health? .....**2d.** Is your skin soft and moist, or is it rough and dry? Is it sallow or yellow, or are there brown or red spots on it anywhere?.....**3d.** Are your parents living, if so, at what age? If either, or both dead, of what did they die? Any hereditary disease in the family? Do you know if your parents, or either of them, were out of health at the time of your conception, birth, or infancy; and if so, what was the disease? Do you mistrust temperamental inadaptation on the part of your parents; if so, describe the personal appearance of each. If you have lost near relatives, of what did they die?.....**4th.** Any trouble of mind; if so, what causes it? Have you ever had fits or spasmodic difficulties of any kind? Have you ever been severely frightened, or kept a long time under the influence of great anxiety or fear? Have you ever over-taxed your mind with study or mental labor? Are you affected with loss of memory? Have you met with any painful disappointments, which for the time-being, nearly or quite prostrated you? Do you sleep well; and if not, does it make any difference as to the position you occupy in sleeping? Can you rest better on one side than on the other? Have you frightful or disagreeable dreams? Amorous or lascivious dreams? Are you drowsy during the day? Are you made to laugh or cry easily?.....**5th.** Have you any bodily deformity; if so, were you born with it, or did it happen by disease or accident? Did you ever meet with any accident which caused sickness or lameness, or severe pain at the time; if so, what? Have you pimples, salt-rheum, erysipelas, ulcers, abscesses, or cancer, or are you in warm weather subject to what are called pimples or rash? Have you been vaccinated; and if so, did the vaccination produce any unusual inflammation or soreness? Were you ever poisoned by any thing which you have eaten, or by coming in contact with any thing of a poisonous character? Have you taken much mercury? Have you any tumors or swellings; if so, where, and how long have you had them? Have you rupture or hernia, or any bunches or protuberances in the belly, groin, thigh, or elsewhere; and if so, do they disappear when you lie down, or protrude worse when you sneeze, cough, or strain? Do you feel strong or weak in body? How far can you walk? Can you run without getting out of breath? Is your flesh hard, or soft and flabby? Do you like exercise, or do you try to avoid it? Are your hands and feet cold

or warm? Are they moist, dry, or hot?.....**6th.** What are your habits—are you regular to bed? Do you use stimulants; and if so, what? Do you use tea or coffee? Do you chew, smoke, snuff, or dip tobacco? Do you use opium? Do you use animal food? Do you eat rich pastries, pickles, or condiments, excessively? Do you eat pork? Do you eat at bed-time? Are you conscious of having injured yourself by any bad habit?.....**7th.** Any trouble in the head, headache, any pains, neuralgic or otherwise, in the front, back, or sides of the head, or in the face or neck, dizzy sensations, rush of blood to the head, heavy, oppressed feelings? Do you suspect catarrh, or have you excessive mucous discharges from the nose or throat, attended with heaviness or pain over the eyes?..... ....**8th.** Are you troubled with weak or inflamed eyes, or irritated eyelids—have you dullness of vision—stars—specks or streaks of rays floating before the sight—sparks of fire before the sight—halos or circles around a gas, lamp, or candle light—appearance of clouds or mists before the sight—the sight of eye enlarged—do you squint—are the eyes watery; and if so, do the tears trickle down the cheek—is there twitching of the eyes or eyelids—pains or throbbing in eyeball or about the eyes—any inability to keep the eyes open—do the eyes become gummed or glued during sleep—have they been injured by any thing getting into them—have they been operated upon?.....**9th.** Any trouble about the ears—defective hearing—roaring or ringing in the ears—are they too sensitive to sound—earache—discharges—excess of wax—dryness?.....**10th.** Is the tongue coated; if so, all over or on the back, or in patches—white or yellow; are there deep furrows or wrinkles, or small red points, or pimples on the tongue? .....**11th.** Any trouble in the mouth—diseased teeth or gums—scurvy in the gums; canker in mouth—dryness—excessive moisture—any unpleasant taste in mouth—bad breath?.....**12th.** Any affection of the throat—raise from throat—tickling in the throat—predisposition to soreness—choking sensations—hoarseness or weakness of voice—enlargement of the tonsils?.....**13th.** Do you take cold easily; and if so, where does it affect you—does it produce coughing—dry or loose cough—affect you most nights or mornings—have you a cough now?.....**14th.** If you suspect affection of the lungs, what is the measure round the chest when you take a full breath, and what is the measure when you exhaust the

breath? If you know how, count the pulsations at the wrist, and state how many in one minute, in different postures, lying down, sitting, and standing. Have you tenderness, pain, soreness, constriction, or weakness about the chest? Do you raise; and if so, does the expectoration sink in water—is it streaked with blood—do you raise blood—are your ankles swelled—do you have night-sweats—flushed face in the afternoon—chills—do you stoop in sitting or walking? Did you ever have intermittent, remittent, typhoid, or bilious fever?.... ... ...**15th.** Have you palpitation of the heart—pains or soreness about the heart—any unusual feeling there—a sense of stoppage, or other disagreeable symptoms?.....**16th.** Any thing the matter with the stomach—dyspepsia—soreness—gnawing—burning, or pain in the stomach—any feeling of emptiness or goneness—sourness—wind—trembling, nausea or sickness in that region? Is the appetite good—poor—variable—voracious? Are you, or have you been, careless about what and when you eat?.....**17th.** Any thing the matter with the bowels—are they loose—costive—bloated—sore or tender on pressure? Have you taken much physic? Have you piles; if so, blind—bleeding—itching—internal or external? Have you fistula?.....**18th.** Do you have weakness pain, soreness, or lameness across the lower part of the back? Do you have any pain or uneasy feeling in the lower extremity of the bowels, over the region of the bladder? Do you have to pass water often; and if so, how often—and does much or little pass at each time? Do you have pain or smarting in passing water? Is there sediment; and if so, is it red, white, brown, yellow, or gritty? Has the urine a milky appearance? Is the water highly colored? Does matter, blood, or gravel pass with the urine? Have you had any venereal disease; if so, what, when, and how long, were you affected? .....**19th.** Do you have pain in any part of the body; if so, where? Do you feel weakness, soreness, numbness, or other disagreeable sensation in any part of your system? Are you subject to cramps?.....**20th.** Are you married or single; if married, have you children; and if so, are they healthy? If no children, do you desire them? Is the fault supposed to be wholly on the part of the husband or the wife, or both? If children desired, describe the color of your partner's eyes, hair, complexion, height, weight, age, how many years married? Also describe your own and your companion's foreheads; are they in both cases rather broad, full,

and perpendicular, or are they retreating in front and tapering at the sides? Or, does the forehead of one greatly differ from the other? (If possible, in cases of barrenness, send photographs of husband and wife, giving a three-quarter view of the face, or else a profile; also, read essay on "Physical Adaptation" in Part IV., and the chapter entitled "Hints to the Childless" in this Part, and then give all the information you may think of importance to enable me to ascertain the cause of your unfruitfulness.).....**21st.** If a male, do you have involuntary seminal emissions; and if so, how often—at night, or during the day, or both—how often at night—how often, and when during the day? Do these emissions result from solitary indulgence or from excessive sexual intercourse, or both? Is your erectile power partially or wholly gone? If married, is the discharge of semen premature in sexual intercourse? If married, did you have involuntary emissions before marriage? Are the testicles diminishing in size? Are they swollen, enlarged, painful, aching, tender to the touch? In taking hold of the testicles, is there any feeling like a bunch of earth-worms in the scrotum or pouch? Have you excessive or morbid amative passion?..... **22d.** If a female, are you troubled with leucorrhœa, or whites? Have you any bearing down, or dragging feeling in the region of the womb? Is sexual intercourse painful? Are you affected with sexual apathy, or any want of amative excitability during sexual connection? Are you troubled with excessive amative desires? Are your courses regular—painful before, after, or during the flow—slight in quantity, or profuse, or about right? How many days do they continue? Do you have soreness, irritation, smarting, or itching in the vagina? Have you ever had miscarriages; if so, how many, and at what period of pregnancy each time, and were the causes accidental, medicinal, or surgical?.....**23d.** Is the place of your residence considered healthful? If on the side of a mountain or hill does it face the north, south, east, or west? Is it damp or foggy?

Answers to the above questions will enable me to judge nearly, if not quite, as correctly of the nature and extent of a disease as a personal examination. In answering, Correspondents need not say they are not troubled with this, that, or the other difficulty, but *mention only the symptoms they have*, as they look over the questions one by one. Correspondents are also requested not to simply say Yes or No, after putting down the figures before each set of

QUESTIONS, but state the symptoms fully. Many of the questions pertaining to complexion, height, weight, measure, etc., may appear, at first sight, trifling, but they are of *first importance*, because on answers to these I must depend in forming my opinion of the *temperament* of one whom I am not permitted to see; therefore, no one should pass over them in describing his or her case. When perfectly convenient to do so, in addition to answers to the questions, a daguerreotype, ambrotype, or photograph might be sent with the letter. Many invalids at a distance pursue this plan in consulting me, and, although it is by no means important in all cases, something may occasionally be gained by the patient so doing. All may safely confide in the author in describing fully and frankly a case, or giving the result of treatment. I am daily in receipt of letters from patients giving the most gratifying accounts of the effects experienced in pursuing my advice, and which, if published, would greatly redound to my credit, but I never publish any letters or parts of letters with the name of the writer, unless his or her consent has been expressly given, and even then, but seldom, as the good results of my practice are too well known to need any evidence of this kind. I have, however, appended, in the closing pages of this chapter, a few evidences of my success for the benefit of any who may not have heard of the cures attending my system of practice, and additional testimonials will be furnished to those who desire them. My address is given on page 910.

Warranting Cures.

The question is often asked me: "Will you warrant a cure?" In order that those who read these pages may understand my position on this point without interrogating me, I reply to this question, emphatically *no*. Invalids must remember that they have as much to do, and often more, in effecting cures in their cases, than the physician. Medicines must be used with *regularity*, and general directions strictly observed to insure success, and it is not reasonable, therefore, to ask the physician to shoulder the whole responsibility. However skillful a physician may be—however adapted his medicines to any particular case—however wise his hygienic advice—unless the patient does his or her part faithfully, treatment never so appropriate—never so skillful—may prove abortive. As well might a man carrying one end of a stick of timber, ask his compan-

ion at the other end if he would warrant the stick not to drop. The latter would doubtless reply, "I can only speak for my end."

Those who are disposed to employ me may rest assured of one thing, viz.: that I shall not hazard my reputation, gained at the expense of close application and years of toil, by giving any unwarranted encouragement or uncandid diagnosis. The course I have pursued has been strictly in accordance with this principle, and I shall not, under any circumstances, in the future, pursue any other. I may not, in *all* cases, be as successful as I at first expect, but I will guarantee that I will cure as large a percentage of my patients after they have been given up by old-school practitioners, as the most successful of allopathic doctors do in treating cases *first presented to them*, many of which are neither difficult nor complicated. Nearly all becoming my patients, have been under the treatment of six to twenty different physicians before employing my services, and I now invite the most obstinate and intractable cases to consult me, for it is my ambition to raise the most hopeless cases from the grasp of disease. Ordinary cases can be cured by ordinary remedies. Every town must have its physicians; as before remarked, they are "necessary evils," and I will not utter a word to their disparagement, if they do not poison their patients with pernicious drugs and mineral preparations. I only invite the consultations of those who have failed to find relief under their treatment. In such cases, I find in disease a foe I delight to combat, and, with God's aid, conquer.

Evidences of the Curability of Chronic Diseases.

In presenting the following evidences of the curability of chronic diseases, the author begs the indulgence of his readers while offering a few explanations:—

1st.—Let it be understood that these evidences are presented mainly for the encouragement of the invalid: my time is already fully, pleasantly, and profitably occupied in attending to an extensive practice; still, no attempt will be made to conceal the satisfaction I feel in being able to lay before the reader some evidences of the extraordinary success which, with Divine help, I have been able to achieve under my system of practice.

2d.—The signatures of the writers are omitted from the extracts

of letters in compliance with a standing promise, made at the very beginning of my practice, and repeated in every edition of this book published for ten years, that the names of all correspondents and patients should in no case be mentioned; this rule appertains to all patients whether they consult me by letter or in person. The affidavit of their genuineness should however compensate for the omission of signatures.

3d.—As it has been contrary to my practice to ask testimonials, and, with few exceptions to accept them when proffered, the following are wholly from patients at a distance who have consulted me by letter; but if difficult chronic diseases may be cured when the patient receives treatment by letter and express, they certainly may be under the personal care of a physician, with the advantage of frequent interviews. The reader will undoubtedly regard the former the greater triumph; I can hardly say that I do, as my practice in the treatment of diseases at a distance is reduced to such a system by the aid of a carefully prepared list of questions, and by registers in which each case is carefully minuted with reference to symptoms, and to remedies dispensed, that consultations by letter are usually entirely satisfactory and successful.

4th.—An extract detached from the body of a letter is often less expressive of satisfaction and gratitude than the letter would be if presented in full; but room can only be spared for a brief quotation from each, and manifestations of thankfulness and joy on being relieved, or seeing a prospect of cure, are necessarily in most cases omitted.

5th.—Nevertheless, these testimonials are of more value than they would be if they were obtained by solicitation, because, as they now appear, they possess the spontaneous acknowledgments of grateful patients who have been benefited or cured.

6th.—The quotations from letters have been hastily collected, consequently they present cases in all stages of treatment; some just beginning, others further advanced; and still others at the close. My first impulse was to present only cured cases; but on reflection I think my readers will be more interested in the expressions of patients in all stages of treatment, just as their letters reach me from day to day. This course will also save time in collating the matter to be presented.

7th.—As nearly as I can, without taking too much time and

trouble in selecting them, I shall give quotations from letters representing a variety of diseases; but want of time will prevent me from making the variety successfully treated as extensive as my files of letters would afford if fully examined.

THE AUTHOR'S AFFIDAVIT.

State of New York, } *To Wit:*
County of New York. }

EDWARD B. FOOTE, of the City of New York, in the County aforesaid, being duly sworn, says: That the extracts of letters from which signatures are omitted, which he hereunto appends, are genuine quotations from letters received by mail or otherwise, from the various counties named over each extract, which letters are now on file in his office. And further, that the said testimonials were written without his (the deponent's) invitation or solicitation, and that they are but samples of those daily received by him from all parts of the country, and from people of all classes, embracing physicians, clergymen, lawyers, artists, etc., as well as those in the humblest position in life; and further says not. EDWARD B. FOOTE.

Sworn before me, this 5th day of May, 1866.

JOHN T. HOFFMAN, Mayor of the City of New York.

[Copy.] [Since, Governor of New York.]

CASES OF DISEASES OF THE BREATHING ORGANS.

Case of Catarrh of Twenty Years' Standing.—A gentleman writes from Cook Co., Ill.:—"I am happy to inform you that my catarrh has been completely cured from the course of medicines you gave me, and I think I shall need no more medicine."

Case of Catarrh, Bronchitis, etc.—A gentleman writes from Milwaukee Co., Wis.:—"I seem to be all right, thanks to your treatment. Whether you have, or not, ever an opportunity to do me any more good, I shall never cease to speak *good words* for you for what you have done, and my friends are continually doing the same."

Case of Bleeding Bronchitis.—A gentleman writes from Worcester Co., Mass.:—"Before taking your medicine I spit blood freely from the throat; now I do not. I suffered with cold hands and feet; now I do not but little. My skin was dry and did not act; now I perspire freely."

Case of Laryngitis, Bronchitis, etc.—A lady writes from Worcester Co., Mass.:—"If I ever need medicine again, as my mind is now, I shall not take any but yours."

Case of Scrofulous Sore Throat.—A gentleman writes from Albany Co., N. Y.:—"I am glad to state to you that the sore mouth and throat that has troubled me for the past six years, has given way under your medical treatment. The money paid you I look upon as a good investment. My personal experience satisfies me that your mode of treatment in chronic diseases is superior to any other of which I have any knowledge."

Case of Affection of the Throat and Lungs.—A gentleman writes from St. Lawrence Co., N. Y.:—"My cough is much abated; throat is in a much better condition. Judging from the present feelings of my left lung, I should say that it is now nearly well."

Case of Asthma.—A gentleman in Queens Co., L. I., writes:—"I have lived in this region and in Connecticut for the past five years, most of the time, and when at home have not passed one week without a paroxysm of asthma until I became your patient

last summer. The paroxysms were generally very severe and distressing. From the time I commenced taking your medicines the disease grew lighter and lighter, and in three or four weeks it left me entirely, since which time I have not had a paroxysm, though I am now only just recovering from a severe cold. It is now nearly six months since my old enemy disappeared, and I hope never to return."

Case of Consumption.—A lady writes from Grand Isle Co., Vt.:—"About four years ago you cured my father, when three of our doctors here had tended him for about six months, and gave him up, saying there was no help for him."

Note: While treating the case alluded to above, I received a letter from the patient containing the following: "I was using good brandy and tonics, as the doctors term it, but was unable to go out of doors; but after getting your medicines I set them all aside, and have taken none but yours since, and have been gaining ever since. The neighbors think you have almost raised the dead, as no one thought I could get well."

Case of Raising Blood, complicated with Spermatorrhœa.—A gentleman in one of the departments at Washington, D. C., writes:—"I rather expect to go to New York about the first or middle of next month, when, of course, I shall call upon you, that you may behold another living witness to your skill—another spared monument of mercy—another fellow human being, in whose heart gratitude to you and Heaven sits enthroned, and who wishes to express it verbally."

Case of Pulmonary Consumption.—A gentleman writes from Poweshiek Co., Iowa:—"My case so far is considered almost a miracle by those who knew my condition. I feel I owe my present state of existence to you, and I feel it my duty to recommend you to others."

Case of Consumption in which the left lung was entirely destroyed.—A gentleman writes from Worcester Co., Mass.:—"I would just say that we feel greatly indebted to you for what you have done for us, raising my wife, as it would seem, almost from the grave."

CASES OF DISEASES OF THE LIVER, STOMACH, AND BOWELS.

Case of Ulceration of the Liver.—A physician, formerly professor in one of the medical schools of Philadelphia, writes from Philadelphia County, Pa.:—"When I came to you I was so much emaciated in flesh that I scarcely weighed a *hundred pounds!* I believed that I was rapidly wasting away from pulmonary disorder—stated to you distinctly that my lungs were hepatized, and that there were also some organic difficulties of the heart. You ridiculed both suppositions, and said that I labored under *Hepatitis*—that the ulcerations of the liver had already eaten through the diaphragm, and were devouring the bronchial tubes, or at least discharging their tuberculous or cancerous matter through those apertures and throat. I accepted your *diagnosis* as a very correct and rational one, and commenced a course of your *electrical* medicines, including the applications from the beautiful and *safe* electrical apparatus, as invented by yourself. In three weeks I began to gain strength and flesh, and, before the first course of two months was exhausted, found myself weighing 118 pounds, a gain of full twenty pounds in the period of eight weeks. Not only did I gain in muscular structure, but the nervous tissues were most signally improved and exalted, thus confirming the doctrine of the ablest magnopathists, that *electricity* is 'LIFE;' and that electricity, whether known as magnetism, galvanism, or what not, is *really identical* with the *nervous influence* of the animal economy. At any rate, thanks to the recuperative efficacy of your very pleasant electrical medicines—your soothing electrical applications to my physical

frame—(a mere skeleton at best, like an effigy of bones strung on wires, as found in the museums and anatomical theatres of the medical schools)—and your dietetic and hygienic rules, I was finally brought out of the depth of most helpless affliction to a degree of comfort and health almost equal to the palmiest I ever enjoyed in a life of half a century of years. Indeed, I now feel that I am a 'mere boy again'—full of gayety, animation, and strength, calculated to serve me for at least a score of years longer, or until I shall reach the biblical age of threescore and ten."

Case of Torpor of the Liver, Constipation, etc.—A gentleman in Aspinwall, writes:—"I have just finished your course of medicines, and must say that I have not felt so well for five years back—in fact, I am a new man."

Case of Dyspepsia, etc.—A gentleman in Canada West writes:—"To allude to my present condition, I may say I have made wonderful improvement during this course. I begin to feel very much like myself. I do not think I could eat a meal with such relish for five years."

Case of Obstinate Dyspepsia of many years' standing.—A lady in Washington County, N. Y., writes:—"I have no recurrence of the distressing dyspeptic symptoms I formerly experienced, and my general health is so far restored that I feel hopeful of realizing your cheering expectations of *my becoming a fleshy old lady.*"

Case of Constipation.—A gentleman in Fulton County, N. Y., writes:—"I feel almost like a new man. My bowels are regular, not having missed a daily passage since a week previous to being at your office, which was on New Year's day, and my water-works are all right." [He was under treatment previous to calling at my office.]

Case of Constipation and Flatulency.—A gentleman in Allegheny County, Pa., writes:—"The flatulency of my stomach is almost gone. My bowels are regular with a rare exception. There is a vigor, strength, and happiness experienced through my whole system," etc.

Case of Chronic Alternate Attacks of Diarrhœa and Constipation.—A gentleman writes from Greene County, Mo.:—"It is to you that I owe my life. Up to the present time I have improved every hour since I received your medicines. May God bless you in your work—to cure the afflicted and raise them as it were from the arms of Death."

Case of Chronic Diarrhœa of three years' standing.—A lady writes from Oswego County, N. Y.:—"In regard to my husband, Mr. D. has not been sick a day since he commenced taking your medicines, and is beginning to look forward to an entire recovery." A few months later the same lady writes:—"Mr. D. still continues to be well."

Case of Itching Piles.—A patient writes from New Hanover County, N. C.:—"I am entirely clear of the itching I described to you."

Case of Tumorous and Varicose Piles.—A husband in Franklin County, Vt., writes with regard to his wife:—"From the piles she has nearly or quite recovered. For this much we are doubly grateful, she was such a sufferer therefrom. I think in that complaint your medicines do wonders."

Case of Hemorrhoids, Dyspepsia, etc.—A lady writes from Androscoggin County, Maine:—"That medicine of yours seems almost magical. All can see the good effects it has had on me. I can stand to work longer, and walk better than I ever could since my younger days—thanks to your knowledge and skill."

Case of Fistula, Piles, etc.—A patient writes from Fairfield County, Conn.:—"That disease of the rectum," etc., "I believe to be entirely cured. For the relief I have

* For affidavit to the genuineness of these quotations, see page 591.

obtained from this difficulty alone I shall ever hold you in grateful remembrance. It is the same as described by Dr. Dixon in the 46th *Scalpel*. He expresses the opinion that it can be cured only by resorting to very stern measures, which he describes. Dr. R. C. Newton was of a very similar opinion. I felt that I could not submit to such treatment, and my experience with yourself proves (happily for me) that it is not in all cases necessary. Previous to the time of obtaining relief, I had been afflicted, more or less, at intervals for five years, the latter part of the time quite severely."

Case of Chronic Ulceration of the Rectum and Bowels.—A gentleman in Cook County, Ill., writes:—"I am entirely a different man from what I was a year ago, and have done a hard summer's work."

Case of Excessive Hemorrhage of the Bowels, complicated with Ulceration.—A gentleman writes from Jefferson County, Wis., about the son of a neighbor:—"Since he commenced taking your medicines, he has gained every day, and got smart every day. Now we can see a blood look about his flesh. Doctors out here said that the man that cured Mr. J.'s son was a smart man."

The same correspondent, in a subsequent letter, says:—"Since you are helping Mr. J's son your name goes like wildfire. Physicians all said this young man could not live. But, doctor, they think you have almost raised the dead."

CASES OF PAINS AND ACHES.

Case of Constant Headache, Pains in Eyes, Chest, and Stomach; Bearing-down in Rectum and Womb, etc.—A lady writes from Cook County, Ill.:—"My health has been the best, and I have suffered the least pain I ever did in the length of time since I can remember, and it is all from taking your medicines."

Case of Nervous and Bilious Headache and Great Debility—A lady in Suffolk County, N. Y., writes:—"All my friends think that the improvement in my health during the time I have been treated by you is something approaching a miracle."

Case of Cramping of the Stomach accompanied with Convulsions.—A lady in Houston County, Minn., writes:—"I showed the letter which you wrote, to the doctor that attended our son through those spells, and told him I had sent for the medicines. After reading the letter, he said he would rather risk him in your hands than in those of all the doctors in Houston County. I believe your medicines, with the blessing of God, saved his life."

Case of Neuralgia, etc.—A lady in Greene County, Wis., writes:—"I do feel so grateful to God for providing me with such a physician as you are. I have suffered so much for the last twelve years. I have taken a great deal of medicine that never did me one bit of good until I commenced to take yours. I am so thankful that I had confidence enough in you to trust my case in your hands."

Case of Mercurial Rheumatism and Sciatica.—A gentleman in Kendall County, Ill., writes:—"I am requested to say for Mr. C. that he has great pleasure in saying that he is now as well as he ever was in his life, and that it is owing to your treatment that he is enabled to say so."

CASES OF AFFECTIONS OF THE EYES AND EARS.

Case of Old Eyes.—A gentleman in Knox Co., Ill., writes:—"I have now dispensed with the use of glasses after *twenty-two years'* confinement to the use of them. It seems curious to me that I can now pick up the hymn-book, Testament, or newspaper, and read with my natural eyes."

Case of Impaired Vision with Complications.—A lady in St. Lawrence Co., N. Y., writes:—"Doctor, all the 'blue smoke,' as I used to call it, is gone from my eyes. The very flowers look different. Oh! how I do wish I could see you and talk with you. All I can say is: Thank God I can see once more. Thank Dr. Foote I can see."

Case of Roaring in the Ears, Discharges therefrom, etc.—A lady writes from Butler Co., Ohio:—"Receive a thousand heartfelt thanks for all you did for me; and I pray your life may be blessed in affording relief to suffering humanity." Later the same lady writes:—"My hearing has greatly improved. All my pains have ceased."

Case of Deafness.—A gentleman in Rensselaer Co., N. Y., writes:—"Ten years ago you treated my son, who was very deaf, and with *perfect success*, and this is the reason why I have sent her" (another person affected with deafness) "to you."

CASES OF AFFECTIONS OF THE HEART.

Case of Palpitation and Arterial Throbbing all over, etc.—A lady in Cook Co., Ill., writes:—"Mrs. K. is getting along splendidly. I almost envy her, she looks so much better and is so much stronger. She is perfectly delighted."

Case of Valvular Obstructions, etc.—A patient writes from Brant Co., C. W.:—"The distressing pains I have felt for several years about my heart—the flutterings—the stoppages—the thumpings or palpitations, have entirely ceased."

Case of Enlargement of the Heart.—A patient in Rutland Co., Vt., writes:—"Your very kind letter and package of medicines came to hand in due time, and the medicines seem to be just what I want."

Case of Ossification of the Heart.—A clergyman in Worcester Co., Mass., writes:—"I trust your usual success attends you, and must still believe it does wait upon your skill. It is to you I owe the health I have enjoyed the past year, for you saved my life one year ago from a fell disease, and my heart from utter discouragement, when all looked dark, and the future gave no promise of hope. I shall follow you with kind wishes and prayers, and shall recommend you to the afflicted."

CASES OF DISEASES OF THE URINARY ORGANS.

Case of Chronic Inflammation involving all the Urinary Organs.—A gentleman in Orleans Co., La., writes:—"I am now so well that nothing can make me in better health except gradual progression that may result from attention to, and an observance of the laws of health. As I consider that I owe my present excellent condition, especially the quiet and easy state of the bladder and liver to your remedies, I think it fit so to inform you."

Case of Chronic Gonorrhœa or Gleet.—A gentleman in Suffolk Co., Mass., writes:—"I have no more discharge than formerly, and if any thing, I should say it was a shade thinner and a little lighter in color." Same correspondent says in a subsequent letter, "perhaps you would be pleased to learn that I am *very well*."

Case of Scalding of the Urine and almost Unbearable and Incessant Desire to Urinate, etc.—A patient in Suffolk Co., N. Y., writes:—"As I write I can not avoid comparing my present health with my former sufferings," etc.

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* For affidavit to the genuineness of these quotations, see page 591.

CASES OF DISEASES PECULIAR TO WOMEN.

Case of Irregular and Painful Menstruation.—A young lady in Tompkins Co., N. Y., writes:—"I am happy to inform you that I am much better than when I first commenced taking your medicines. My friends think if I am careful not to over-do, it will not be necessary for me to take a second course."

Case of Menstrual Derangement and Great Debility.—A lady in St. Louis Co., Mo., writes:—"My daughter's health still continues to improve. I think she is getting along finely, and am confident that you will eventually restore her to perfect health."

Case of Painful Menstruation, Flooding, and Leucorrhœa.—A lady in Onondaga Co., N. Y., writes:—"I am improving every day. I must tell you that I am just getting through with my monthly campaign, and have thus far escaped all suffering, and this is the fourth day. Am I not fortunate?"

Case of Bad Leucorrhœa, and General Debility.—A lady in Yates Co., New York, writes:—"I am very thankful to God for his kind care of me, and to Dr. Foote for his good advice and medicines. I wish every suffering person could receive as much benefit as I have from them."

Case of Falling of the Womb of Twenty-Five Years' Standing.—A lady in Monroe Co. Ohio, writes:—"I feel thankful that your name ever came to my notice. If I had not placed myself under your care I do not know where I would have been. I was feeling as though my life was wearing away. I have been under the treatment of six different physicians before you; no one of them told me that they could cure me. I had given up all hopes until I consulted you. I shall circulate your name as far as I can, believing you to be worthy of praise." [Subsequent letters from the same correspondent were to the effect that she needed no further treatment.]

Case of Ulceration and Falling of the Womb.—A lady in Boulder Co., Colorado, writes:—"Your medicines have done more for me than any medicines I ever took. I feel perfectly safe in recommending you to the sick as the best doctor in the world. We think your medical book ahead of any thing we have ever seen."

Case of Ovarian Affection, Sexual Apathy, Dyspepsia, and Debility.—A lady in Cook Co., Ill., writes:—"I do feel real well and strong, and I think it is all owing to your treatment."

Case of Sexual Apathy.—A lady in Coles Co., Ill., writes:—"I should indeed be very ungrateful if I did not write to thank you for all your kindness and the very great benefit I have received from your treatment. I believe I may say that I am comparatively cured."

Case of Amorous Dreams, Great Nervousness, and Apprehended Insanity, resulting from Self-abuse.—A lady residing in Maine writes:—"I am happy to inform you that my health has been slowly but surely improving from the day I commenced taking your medicines."

Case of Painful Menstruation, etc.—A young lady in Bristol Co., Mass., writes:—"I am most happy to say that I am enjoying good health now, and, in fact, have been very well all winter. I am not troubled with the catarrh now. My monthly periods are regular, and I suffer but little pain at the time. I am much pleased to say that, since taking your medicines, during my periods, I am up and around as usual. Before taking your remedies I was destined to lie in bed one day, and suffer terribly all the time." [At the commencement of the treatment of this lady she wrote that at each menstrual period she was thrown upon her bed, her body cold and almost lifeless, and that she suffered dreadful pain and agony in the lower part of her stomach and back. The lower limbs, hands, and the feet became cold and blue, and the menses sometimes were suppressed altogether.]

CASES OF BARRENNESS.

Note.—Although I have cured many cases of this kind, I labor under some difficulty in presenting extracts of letters acknowledging cures, as in looking them up I encounter in nearly every important case an obstacle substantially like this: "You must in no case make use of my name or extracts of my letters." I will, however, append one, without naming the county wherein the patient resides.

Case of Barrenness.—A lady residing in this State writes:—"At any rate, I have a sweet little babe, and, as my husband often remarks, it is your skill that has made such a thing possible."

CASES OF DISEASES OF MEN.

Case of Weakness of the Procreative Organs.—A gentleman in Nova Scotia writes:—"I will tell you the difference they the [medicines] have made in me. I have none of the fits of blues I used to have so frequently; no lascivious thoughts, amorous dreams, or waking anxiety, and am surprised to find that the absent-mindedness I was troubled with has nearly all fled."

Case of Seminal Weakness.—A gentleman from Cook Co., Ill., writes:—"I feel quite restored to health again, so that I do not think it necessary to renew the treatment. The nocturnal emissions have ceased, and I have already gained a great deal of strength."

Case of Diurnal Losses, Partial Impotency, and Irritation of the Bladder.—A gentleman in Davidson Co., Tenn., writes:—"I am doing very well, myself. The pains in my back have nearly all left me. I feel as strong as a young bull; my penis and testicles have a healthy appearance; my appetite is good, and my face has a healthy glow. My eyes are fuller than they were, and the dark rings have nearly disappeared, thanks to your treatment."

Case of Complicated Spermatorrhœa.—A gentleman in Lancaster Co., Pa., writes:—"My nocturnal and diurnal emissions are perfectly well."

Case of Impotency, etc.—A gentleman in Tuscarawas County, Ohio, writes:—"The effect of the remedies sent me about a month ago have so much benefited my affairs that I feel confident, with the aid of nature, my health will soon prove entirely restored."

Case of Seminal Weakness, etc.—A gentleman in Highland County, Va., writes:—"They [the testicles] are both much firmer than when I commenced your treatment, and my penis much larger. Also my buttocks and thighs."

A VARIETY OF CASES.

Case of Cancer of Breast.—A gentleman in New York Co., N. Y., writes:—"By the way, I met Mrs. B. to-day. She is looking well, and feels well—cancer cured. She is highly pleased with your treatment, and has most unbounded faith in your remedies. She is in excellent spirits, and seems to be completely rejuvenated.—H. J. M." [This was a case of cancer of the breast about as large as a pint bowl, and several of our most eminent physicians of this city had decided that there was no cure for the case, except amputation. The case referred to has called at the office since her cure, and there is no reason to believe that it is not permanent.]

* For affidavit to the genuineness of these quotations, see page 591.

Case of Scrofula Affecting nearly every part of the System.—A gentleman in Windsor County, Vt., writes:—"I cannot express my gratitude to you for the benefit you have done me, as an instrument in the hands of God." In a subsequent letter he writes:—"I have not felt so well for thirty years."

Case of Scrofula, in which the Disease attacked the Stump after Amputation of the Limb.—A gentleman in Lamoille County, Vt., writes:—"My people and I think that to your medicines I owe my life. I failed rapidly after I wrote you and before the medicines arrived. My abscess discharged a corrupt pus, and my friends predicted a speedy dissolution. I had the utmost faith in you to restore me to health, and my expectations bid fair to be realized. I have gained so fast in health, flesh, and strength, that all concede an ultimate recovery. My nervous system is in a better condition. My appetite cannot be beat. I am more than satisfied with the benefit of this course." [I have since met this patient, and he seems grateful, hearty, and well.]

Case of Inherited Syphilis—The face a mass of putrefaction and scabs.—A lady in Erie County, N. Y., writes:—"Dr., I am so thankful I went to see you, for I knew you could cure me and now I am sure of it." As this case was rapidly improving when I last heard from her I presume she is well.

Case of Secondary Syphilis.—A gentleman in Brant County, Upper Canada, writes:—"I am entirely recovered from my terrible disease. The blotches and sores have entirely disappeared from every part of my body, and I feel as well as I ever was in my life, thanks to your rare skill and the wondrous efficacy of your remedies."

Case of Paralysis, Rheumatism, etc.—A gentleman in Jefferson County, N. Y., writes:—"I have taken my medicines, and the result is I am now in normal health. Your remedies were mild, and did the work complete. I recommended two more patients to you, and presume you can help them."

Case of Paralysis of all One Side of the Body.—A lady in Albany County, N. Y., writes:—"Probably he (my husband) feels that I have been the most immediate recipient of your skill and kindness, and yet allow me to express our mutual satisfaction with your medical treatment. For my own part, my satisfaction is so near akin to affection, that (*Platonic* though it be) it might puzzle the most astute metaphysician to define the difference."

Case of Paralysis of the Feet, etc.—A gentleman in Jefferson County, N. Y., writes:—"You have been wonderfully successful, so far, in my case, for I now am able to write you, and besides can walk quite well. My left foot is now in its normal health, and my right foot is gaining fast. I can walk two or three miles without tiring. My appetite is good, and I have gained in flesh while under your treatment."

Case of Dropsy.—A lady in Herkimer County, N. Y., writes:—"The second course of your medicines has given us as much encouragement as the first. I think my health is gradually improving. The dropsical effusion moves slowly though I am sure it goes away."

Note.—For want of time I cannot collect extracts of letters representing so great a variety of diseases as I should like to present; some difficulties, however, not alluded to here, or under previous heads, will be found under the next caption.

COMPLICATED CASES.

Case of Ovarian Dropsy, Chronic Inflammation in the Bladder and Kidneys, Irregular Menstruation, and Pains in All Parts of the System.—A lady in Cook County, Ill., writes:—"My sister in Virginia says 'she is so well she don't know what to do with herself.'"

Case of Scrofula, Spinal Weakness, Affection of the Heart, etc.—A lady in Franklin County, Vt., writes:—"You have done more for me than all the physicians together that I ever employed."

Case of Catarrh, Dyspepsia, Painful Menstruation, Incipient Consumption, etc.—A lady in Susquehanna County, Pa., writes:—"Through your knowledge and skill I have been saved from an early grave. My friends and acquaintances think it is a miracle that I should have recovered when given up as past help by ten different physicians, and I was afflicted with at least eight or ten different diseases, and they were all chronic."

Case of Neuralgia, Painful Menstruation, Nervous Prostration.—A lady in Polk County, Iowa, writes:—"My general health never improved so rapidly before. I have not had a single attack of neuralgia. My life-long periodical suffering seems to have come to an end. I forgot to tell you that I seldom remember, now, the fact that I have nerves."

Case of Paralysis and Amaurosis.—A lady in Warren County, New York, writes:—"Father is improving, and thinks your medicines have had the desired effect." In the next letter she says: "Father is improving, and he thinks he is almost well." In her last letter she remarks: "Father's health is very good."

Case of Complex Spermatorrhœa and a Variety of Nervous Disorders.—A gentleman in Alleghany County, Pa., writes:—"My mind is clear and strong, and my whole system is renewed. I feel an energy and vigor not experienced for years, for which I cannot too fully thank you as the means in God's hands."

Case of Hepatic, Digestive, and Urinary Derangements.—A gentleman in Orleans, County, La., writes:—"Being now, and having been since the effects of your medicines became developed, in excellent health, with good digestion, good appetite, and healthy action of my liver and bladder," etc.

Case of Erysipelas and Tumors in the Abdomen.—A gentleman in Alleghany County Pa., writes:—"I consider it (Medical Common Sense) the best book I ever bought. I also believe it a means in the hands of an over-ruling Providence in directing me to you for medical aid in curing my wife."

Case of Palpitation of the Heart, Great Nervous Prostration, and other Complications caused by Self-Abuse.—A gentleman in Winona County, Minn., writes:—"I have now been taking your medicines for a month or so and I must say they are incomparably the best I have ever taken; they have such a calming and strengthening effect on the nervous system and on the action of the heart."

Case of Incipient Consumption, Inflammation of the Pericardium of the Heart, Chronic Irritation of the Stomach and Intestinal Canal.—A lady in Whiteside County Ill., writes:—"In regard to my health—I eat heartily, sleep soundly, work, read, laugh, talk, and enjoy life generally. Finally, I never enjoyed better health in my life; consequently, I do not know as I need any more medicine. But as I am in the habit of doing whatever I undertake thoroughly, I thought I would take one more course of medicine."

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* For affidavit to the genuineness of these quotations, see page 591.

Case of Scaly Eruptions, Varicocele, Spermatorrhœa, Sleeplessness, Mental Depression, Torpor of the Liver, etc.—A gentleman in Alleghany Co., Penn., writes, five years subsequently to his treatment, as follows:—"My health has been most all that I could wish or expect, for which blessing I am under sincere obligations to you. Weakness and lassitude are unknown, and notwithstanding all the mental torture and the physical and spiritual drain which was the inevitable accompaniment of all that I have passed through, my strength has been unimpaired."

Note.—While under treatment the above patient had his "ups and downs," and was very fearful that he would never recover his health; but at the end of six months' treatment he considered himself cured, and after the lapse of nearly five years of great hardships and business trouble he writes as quoted in the preceding.

Case of Hypochondriasis, and Digestive Derangements complicated with affections of the Procreative Organs.—A gentleman in Lucas Co., Ohio, writes:—"Had I not got relief, I do not know where I should have brought up, but I expect in some Insane Asylum, as no one knows the nervous fears and horrors which I have endured; and I can but express my gratitude for meeting you, and putting myself under your treatment. I commenced the treatment more as an experiment, as you know, and expressed but very little confidence in any relief; and for the first two weeks I did not improve any, that I could see; but after that time, I could see a gradual improvement."

Case of Scrofula, Affecting Stomach, Bowels, Kidneys, etc.—A lady in Nodaway Co., Mo., writes:—"I feel and look a great deal better and feel confident of a restoration to health, or rather being brought to enjoy such health as I have never had in my life. There has been a very manifest improvement in my back, stomach, and bowels. I find the medicine and diet pleasant and good in their effects."

Case of Spermatorrhœa, Impotency, Dyspepsia, and other complications.—A gentleman in Kent Co., Canada West, writes:—"My case has been attended to with the greatest care, and the remedies have always been received in good time and order. I may say, too, that I found them wonderfully adapted to my case, and well qualified to perform all that is said of them."

Case of Nervous Prostration, Bronchitis, etc.—A gentleman in Story Co., Iowa, writes:—"I can scarcely give you a description of my condition now, without saying that I have been improved in every respect: got a clearer head, keener eyes, better appetite, and feel more like living than dying."

Case of Chronic Inflammation of the Pericardium of the Heart and of the Liver, Kidneys, and Chronic Gastritis.—A lady in Macon Co., Mo., after two months' treatment, writes:—"The medicine I have been taking is now used up; and I am so nearly recovered that I do not think I will send for any more medicine."

Case of Dyspepsia, Constipation, Urinary Derangements, and Abuse of Laudanum.—A clergyman in Madison Co., N. Y., writes:—"I think I never enjoyed the measure of health I now do. The difficulties under which I was laboring when I consulted you have left me *entirely*, and I attribute this to your prescriptions. I should add, also, that you enabled me to get rid of the use—the daily use—of foul laudanum; and for this I shall ever be grateful. Yours, under many obligations, and with sincere and thankful regards," etc. [I think this gentleman had used laudanum for eleven years if I remember correctly.]

Case of Tubercular Consumption, Uterine Derangements, Falling of the Rectum, and Nymphomania.—A lady in Dakota Co., Minn., writes:—"I have the medicines,

which are just the thing for me. I cannot particularize. Suffice it to say, that I feel lighter and better every way, and am gaining flesh; weigh five pounds more than I ever did before. Doctor, you don't know how much better I feel. I tell everybody I see where to go to get cured. I lend my book to every one who will read it. I must close my lengthy epistle by wishing you and yours a long life to do good in." In a subsequent letter this correspondent writes:—"I have not forgotten that I owe you $1, and will send it. I owe you more than I could ever pay for. I feel as though your medicines have saved my life."

Case of Scrofula Constipation, and Leucorrhœa.—A lady in St. Louis Co., Mo., writes concerning her daughter:—"I am happy to inform you, that she is improving beyond my most sanguine expectations. Considering that her disease is of five or six years' standing, during which time she has been under the almost constant treatment of the first physicians of the State, I regard her improvement as truly wonderful. I consider it a fortunate, even a providential circumstance, that led me to consult you. At the time I first wrote I was almost in despair. It was found that without relief my daughter's constitution could not bear up many years longer. Through your medical work, I found that you treated patients at a distance. At the same time I met a lady who had been ill for years, and who owed her restoration to health to you. She spoke in such glowing terms of you as a physician, that I immediately resolved to place my daughter under your treatment. My only regret now is that I did not do so sooner."

Case of Curvature of the Spine, Neuralgia of the Heart, Catarrh, Defective Hearing, Chronic Bronchitis, Dyspepsia, Piles, Inflammation of the Bladder, and other Complications.—A lady in Coffee Co., Tenn., after about six months' treatment, writes: "My health is still improving. I have gained one pound for each week for six weeks, besides the eleven pounds I lost at the beginning. My hearing is completely restored. I am much stronger; can work half a day among my flowers steadily."

Case of Mental Depression, Catarrh, Torpor of Liver, Weakness of Kidneys, Partial Impotency, and Inflammation in the Testicles.—A gentleman living in Canada, whose more definite address I do not feel at liberty to give, writes:—"I cannot express to you the heartfelt gratitude I feel for the kind attention you have given me since I became your patient. After a lapse of four and a half months, during which I took the medicines regularly, I took the liberty of discontinuing them, feeling that I was completely cured, and for the last month have not taken any. I assure you I am not the same person I was six months ago, when I called at your office. I then had the most gloomy forebodings in regard to both the present and future, and was very unhappy. I feared my manhood was lost. I employ my leisure in writing for the press. When I look back on old editorials—the emanations of my own brain—I can see only now and then a streak of light piercing the gloom, all my scribblings merging into a sort of chronic sentimentality. I was so subject to what are called in common parlance "fits of the blues," I scarcely knew what to do. These are now all gone. My writings are perhaps a little more wild and careless now, but are filled with new fire and energy. I now enjoy perfect health, performing daily three times more labor than formerly. * * * This may be the last correspondence between us; if so, I wish you, Doctor, a very long and happy life. I shall ever remember you and, depend upon it, shall do all I can for your interest in this locality, although I fear your practice will soon become too extensive."

* For affidavits to the genuineness of these quotations, see page 591.

A BEDRIDDEN CASE.

Note.—In this revision, if my readers will bear with me, I desire to append a brief history of a very remarkable case; one which excited profound interest, and, in its results, marvelous surprise in the region where the patient resided. If any inquiring mind has a curiosity to know what ailed the patient, the question may be briefly answered, by replying that—with the exception of the good woman's soul, of which God must be the judge—there was not a sound spot in her body. The page of the Register whereon her case is minuted; is literally filled up with symptoms and the margins are counter-written. Turn to the list of questions on page 583, and with the single omission of those applying to diseases of immoral origin, all may be answered as adversely as possible, and then the case will only be inadequately described.

On the 26th of January, 1868, I received a letter from this patient, at the conclusion of her treatment, from which I will make the following quotation:—

"I regret to terminate so pleasant a correspondence, and shall take pleasure in calling upon you when we visit New York. Before taking leave I wish to say that if extracts from my former letters or this can be of any service to you, you are welcome to use them in any way you like. And if you desire it, we will send you an affidavit testifying to your success, for I not only consider myself a wonder, but far and wide has been known and discussed the remarkable sufferings and recovery of H. W. Satterly, daughter of Wm. R. Satterly of this place, and now your sincere friend, Mrs. S. F. Smith, East Setauket, L. I."

It was in compliance with my acceptance of her grateful proposition that the following affidavit was subsequently made and forwarded to me by mail:—

EAST SETAUKET, LONG ISLAND, *May* 4, 1868.

Dr. E. B. FOOTE,--

Dear Sir:—Although you are fully aware of the wonderful success of your efforts in my behalf; and although the voice of *one* will scarcely be heard among the many who are daily proclaiming their gratitude to you, I feel it a duty to send you the following testimonial, in order that others may read, believe, and hope. For my case was certainly an unusual one, and almost unparalleled.

When I was but three months old, symptoms of erysipelas were first noticed, and I was never afterward a healthy child, but was always feeble and never able to endure fatigue.

At times I suffered much from erysipelas in the eyes and head, and various parts of the body. At fourteen years of age, my health became very poor, and for more than two years I was miserable indeed often confined to the bed for weeks together. At the end of that time I was entirely prostrated. Then what a sufferer I became! I was tortured with the most exquisite pain, lost all appetite, was reduced to a mere skeleton, and was soon so feeble that I could not raise my head from the pillow.

After a few months I rallied slightly. But the sufferings were only somewhat *alleviated* by opiates, which I took in various forms and in incredible quantities. All efforts to remove the *causes* were vain—all the remedies tried seemed to be of no benefit. Thus I lay for more than four years, helpless and despairing. Then we heard of and applied to you. But I had no hope, no faith in any medicine. For my system seemed to be wholly under the power of disease; the lungs, liver, etc., in a very bad condition, the nervous system completely shattered. For three years the bowels had *never* moved without artificial means. Your reply to our letter of consultation was so gratifying that we

determined that I should be placed under your care. For you guaranteed nothing—did not promise to give me health in a week or a month, but said that you "should expect that I would shortly begin to improve, and by perseverance, be ultimately cured;" and that "my recovery, in order to be real, must be gradual." I commenced using your remedies, and *in two weeks there was a slight, though marked improvement.* Then I began to hope! I continued under your treatment, and we endeavored to second your efforts, and follow your directions in every particular. Gradually the Tyrant Disease was vanquished. The cough and expectoration became better; the pain in the head was lessened; the cramp in the stomach and dyspepsia were relieved; the bowels became active and regular, and, in short, the whole system was invigorated, renewed. In about six months I began to stand alone and gradually my strength increased so that I could walk about my room; and finally—in little less than a year after commencing the use of your remedies—oh, joy of joys! I was able to ride out! *Just five years and four months had passed since I had breathed the fresh air under the open heavens.* About this time I wrote as follows:—

When we look back, and think of the state of my health when I commenced using your remedies, only about a year ago, of my sufferings, feebleness, nervousness, at that time; and when we remember the four previous years of misery, in which countless doses were swallowed, with very doubtful results, and sufferings that were only relieved by morphia; when we think of all this and more—more than I can tell, and then reflect upon the present condition, we cannot indeed but feel very grateful and hopeful, and regret so much that we could not have known of you five, yes, seven years ago. We have no doubt but that, could I have been treated by you then, I should never have become so feeble and thoroughly diseased. To-day, as I write, I can, when weary, lay down my pen, walk about my room, go to the window and look out, breathe the fresh air, and return to my writing refreshed. *A year ago, to-day, I could not; no, not of by doing so I could have gained health itself. I could not have stood alone one second.*

And now I can say that I am stronger, and am rejoicing in better health than I have known for more than nine years. I have entirely relinquished the use of morphia, and though not constitutionally strong and robust, feel that the health I now *enjoy*, is *good* compared to the *ill*-health that I formerly *endured.*

I care not what skeptics may say, I *know that your remedies have helped me.*

And furthermore, I wish to say that I send this testimonial and affidavit entirely unsolicited.

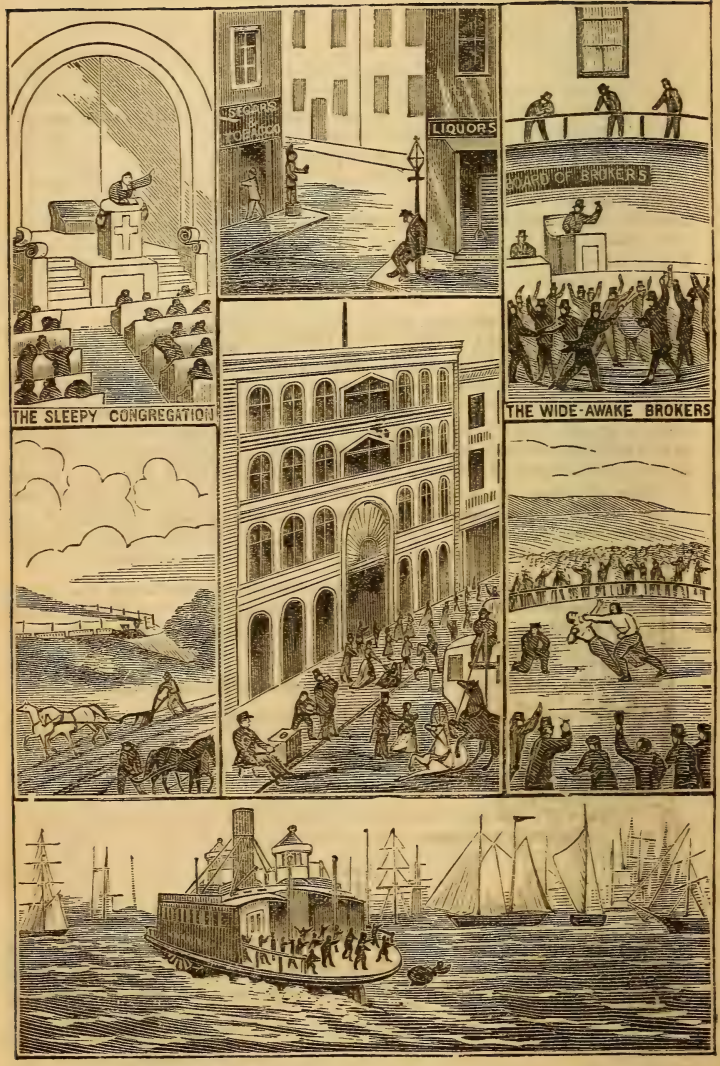
MRS. S. F. SMITH.

Sworn to before me this
4th day of May, 1868.
ORAN W. ROGERS,
Justice of the Peace.

[Copy.]

MORE EVIDENCES FOR THOSE WHO WISH.

Note.—Those desiring more evidences of the curability of chronic disease can have a quarto pamphlet of sixty pages full of them forwarded, postage prepaid, by mail. Those who, wishing to consult the author, cannot call at his office, are referred to the list of questions on page 583.



CIVILIZATION IN THE NINETEENTH CENTURY.

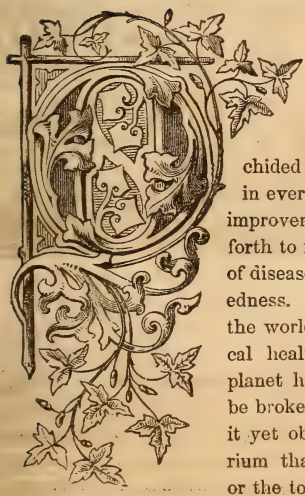
PART III.

Plain Talk

ABOUT THE SEXUAL ORGANS; THE NATURAL RELATIONS OF THE SEXES; CIVILIZATION, SOCIETY, AND MARRIAGE.

OPENING CHAPTER.

INTRODUCTORY WORDS.



IN entering upon a brief consideration of the subjects which will be presented in Part III., I do so in obedience to that monitor within, whose voice has ever chided me when doing wrong, and encouraged me in every step toward my own moral and physical improvement, and in every effort I have ever put forth to rescue my fellow-beings from the bondage of disease, and the grasp of moral and social wretchedness. It is indeed impossible, at this stage of the world's development, to achieve perfect physical health, or attain unalloyed happiness. Our planet has not yet developed a crust that may not be broken by earthquakes and volcanoes; nor has it yet obtained such a perfect atmospheric equilibrium that the hurricane may not sweep the sea or the tornado devastate the land. Science has not yet taught us how we may fully avoid the effects of atmospheric changes, the breath of malaria, or how to live in such a way as to wholly avoid the

approach of disease; nor has yet God's revelation to man become sufficiently understood by our finite minds, to enable us to lay in His arms the soul of a beloved relative or friend without wetting the cold brow which is left us with burning, bitter tears. From all these inevitable terrestrial disasters, physical sufferings, and mental griefs, we must patiently and hopefully turn to those afflictions which it is in our power to avert or mitigate, to the end that we may achieve for ourselves and our children all the happiness which the Almighty has given us power to attain; for while human life is too brief to make wickedness, however seemingly attractive, a bauble worth touching, life is too long to be fettered and embittered by customs and conventionalities which have no root in religion or morality.

All over the world, to-day, individual happiness is "trampled out" by imperial, kingly, sectarian, and social usurpation and tyranny. Scarcely any one dares to utter his real sentiments. The powers of speech, which should be employed for conveying from one to another frank and truthful suggestions and opinions, have become so prostituted, that no one marvels at the saying of Talleyrand, that "language was made to conceal our thoughts." This, indeed, has become axiomatic. In this peculiar condition of national and social government, of political and social morality, it is not strange that men and women all over the world are unwittingly poisoning their individual enjoyments with opinions and customs bearing the embossed and bronzed labels of religion and civilization, which, when weighed by the plain religious assayer, or probed by the votary of science, are as baseless and unnatural as those which sway the minds and habits of ringed-nosed and tattooed-faced heathen.

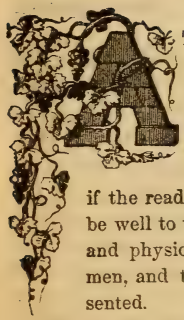
In justice to our civilization, however, it may be said that if it does presently stultify the brain with rum, bedaub the mouth with foul tobacco, fire the soul with envy and jealousy, graduate expert swindlers, create social and religious ostracists, encourage caste based on accident of birth or fortune, and dispense power partially and unequally, it is only in its infancy; and if those who are born head and heart foremost—if those who do not begin the world by inflicting pain and consternation, by a breached presentation—will speak out frankly and make one original suggestion for the benefit of humanity during their natural lives, instead of following, body and mind, in the popular rut, what is now called Christian civilization will eventually become, in fact, what it now is only in name. Civilization has indeed, thus far, done comparatively little for the moral and social elevation of man. It has quickened the wheels of commerce; it has covered the seas and rivers with the graceful canvas of innumerable vessels; it has connected the two great oceans with rails of iron; it has so linked continents that intelligence is conveyed from one distant point to another on the wings of lightning; it has arrayed our rich men and women in fine raiment, and the poor

in rags less ornamental than nature's covering; it shelters our smart people with costly edifices, and the less knowing ones with tenements which scarcely exclude the cold; it has constructed steam carriages which make our remotest friends neighbors, and our neighborly feeling less cordial; it has invented steam ploughs, and turned handsome cattle into the shambles of the butcher. Indeed, our civilization, instead of being Christian, is only the shadow falling before the incoming Christianity, and that shadow is yet so dark and obscure in many of its aspects, that it is but little more than the monstrous caricature of the beautiful spirit whose approach produces it.

Believing, nay, *knowing*—after a long and extensive practice, during which I have been a kind of "father confessor" and confidential counselor, and a receiver of secrets and individual experiences, to thousands of men and women all over the northern continent of America, who have called upon me in person or addressed me by letter—that a very large proportion of the physical ailments and mental disquietudes which afflict humanity grow out of ignorance of the true functions and uses of the procreative organs, incorrect notions regarding the natural relations of the sexes, and erroneous views concerning marriage, I have felt that I should fail to perform my whole duty, if I omitted to present in this volume, as plainly and fully as space and time will permit, such views as my unequaled opportunities for observing human nature, in all its usually concealed peculiarities, have compelled me to accept. In presenting them I must speak as a physiologist, for the best part of my life has been devoted to the duties of my profession. I wish I were also a theologian, for then I am sure I should be able to reconcile with the true precepts of religion every thing herein written, which may possibly *seem* to conflict with popular theology, for there can be no question that *physiological law is God's law.* No one believes that the great Creator ever made conflicting laws. We may misinterpret them, and our misinterpretations may be antagonistic, but the laws themselves are all in perfect harmony. I may misinterpret physiological law, but it would seem as if a parson would be more likely to stumble on this ground than a physician who daily walks over it, and is consequently familiar with its peculiar prominences and declivities. Not professing infallibility, I may make mistakes; but with the love of God and humanity in my heart, I shall endeavor in these pages to say nothing that shall injure the cause of true religion, or imperil the happiness of the human family; for my aim, on the contrary, is to promote both.

CHAPTER II.

THE SEXUAL ORGANS.



AT the very outset of this investigation, it will be profitable to return to the consideration of those organs which prominently distinguish the sexes. Considerable space has been devoted to them in Part II., but not sufficient to answer the purposes of Part III. It is not necessary to reiterate a description of their anatomy; if the reader has not already perused the previous pages, it would be well to turn back and familiarize the mind with the anatomical and physiological facts presented in private words to women and men, and then resume the reading of the matter hereinafter presented.

The Cause of their Disgrace.

The question has occurred to the minds of many thinking men and women of the present day, how the procreative organs came to be regarded with so much disfavor, silence, and a sort of contempt? To any mind divested of popular teaching it would appear strange why anybody should be ashamed of these organs, any more than of the neck or face. The artless child, male or female, unsaturated with popular notions of propriety, is continually shocking its mamma with its total disregard of any attempt at concealment of its person. Men and women, living in a wild state, never envelop themselves in clothing, excepting in cold latitudes, where the furs of animals are adopted as raiment simply for the purpose of preserving warmth. In parts of Mexico which are not wholly outside of the influence of our civilization, people of both sexes bathe together in the lakes and rivers, entirely divested of clothing. In the peculiar civilization of the Japanese, a traveler informs me that the sexes enter the baths together in a nude state. Nowhere, except in our civilization, and in that peculiar to the Mohammedan people, are the sexual organs looked upon with such disgust as to call in question the wisdom of the Divine Artificer; and, again, nowhere does sensuality, in its grossest and most demoralizing aspects, confront the moral and social reformer to so great a degree as in the large cities of Christendom, and in the harems of the followers of Mohammed.

Albeit, the question presented in the opening of the preceding paragraph is easily answered. In the early history of the world, the people of pagan nations, struck with the mysterious powers of the procreative organs to reproduce human beings, deified them — made idols in their image, and worshipped them. These people were in time confronted by those who worshipped the true God, and who were so shocked at the peculiar idolatry of the pagans, that their prejudices to their idols in time degenerated into prejudices to the natural organs God fashioned with his own hands. This prejudice has ripened with each century, and has been handed down from generation to generation, till it forms a part of our religion and civilization.

As the fact of pagan worship of idols fashioned in imitation of the organs of procreation may be new to some of my readers, I will state that archæologists, in their researches, found at Herculaneum and Pompeii, and in various parts of continental Europe, enough of these peculiar idols to form a museum at Naples. This depository of peculiar relics of antiquity bears the name of the "Secret Museum." These idols are made of stone, metal, pottery, ivory, etc., varying in size from charms, which were manifestly worn about the neck, to statues of gigantic size.*

"Not confined to the ancient Romans, this kind of worship spread through parts of Germany and the British Islands, as is attested by the discovery of its monuments in these countries."—(*MSS. American Bureau for Literary Reference, by F. H. Norton.*)

"It is curious that while in one country the male organ was considered all powerful, in another it would be that of the female to which the wonderful powers of deity were ascribed. Thus, in Ireland, carved figures, representing the female organ, have been found over the entrance to churches, while it is related that one of the early kings of Egypt raised columns in some of the countries he had conquered, on which he caused to be sculptured the same symbol."—(*Ibid.*)

It may be a bit of information quite interesting to those who nail horseshoes over their doors for "good luck," that this is one of the relics of the pagan worship under consideration. "It was the universal practice of the Arabs of Northern Africa to nail up in front of their tents, over their doors, the generative organs of the cow, or mare, or the she-camel, to keep away witches and the evil eye. When impossible to obtain these, a rude drawing of the same was substituted. This being crudely and inartistically executed, it assumed various shapes, always, however, approximating to nature. Thus it finally took the shape of a horseshoe, and when the original meaning of this sign had been forgotten, the horseshoe became the talisman, and may be frequently met with all over the world."—(*Ibid.*)

* The facts regarding this kind of idolatry are derived from "A Discourse on the Worship of Priapus," by Richard Payne Knight.

Secular writers affirm that phallic worship, as that form of religion is called which deifies the idols alluded to, is the oldest of any religion or belief now known. It certainly antedates the Christian era many centuries. It was before Plato, Pythagoras, and Aristotle. It existed extensively in the pagan world in apostolic times, and long after. Indeed, it prevailed in Isernia, in the kingdom of Naples, until that kingdom was devastated by the earthquake of 1805, and, stranger still, it continues to a considerable extent in Japan at the present time. A gentleman, who visited that country in the United States service a few years ago, informs me that they have various little gods, and among them those made in imitation of the male organs of generation. These are prayed over by barren women when they desire children. They are publicly exposed in the toy shops for sale. At Kamaquara, a place where there are many temples, there is a large bowlder, upon which is a perfect representation of the female organs of generation (external). They say the stone was found with this device upon it, which, in the light of the discoveries of archæologists, is quite likely. It may have been the work of some pagan artist, many centuries ago, and, from the fact of its having been found in its present shape, it possesses, to those who deify it to-day, a greater degree of sacredness. This bowlder is inclosed in a railing, and barren women go there and kneel and pray and make offerings of money, etc., which they put into the priests' box attached thereto, thinking it will remove their unfruitfulness. The middle and lower classes are said to be all thus superstitious.

"Among many nations," remarks a writer, "it was the custom for the virgin to sacrifice her virginity to a phallic idol before the marriage ceremony, in order to prevent sterility. This custom prevailed in India, Japan, many islands of the Pacific, and, to a considerable extent, still continues. In a public square in Batavia there is a cannon taken from the natives and placed there as a trophy by the Dutch government, the peculiarity of which is, that the orifice for firing it off is made on a phallic hand, the thumb being the phallus. At night the Malay women go to this cannon and sit upon the thumb for the purpose of insuring fruitfulness. When leaving, they make an offering of a bouquet of flowers."

It is a matter of no practical consequence to the question under consideration, when phallic worship began; but every one who has observed the intensity of religious zeal when thoroughly aroused, may imagine and may reasonably imply, by a study of the Bible, with what vehemence the Israelites of old and the early Christians attacked the worship of these pagans, and how naturally prejudices were formed, not only to the phallic idols, but to the least exposure of the organs after which they were fashioned. Can we not discover in all this the origin of the excessive notions of sexual propriety which exist throughout all Christendom, and not only

throughout Christendom, but wherever any higher religion has been pitted against that of the phallic idolaters? In oriental countries, where the female organs were originally deified more universally than elsewhere, and where the Mohammedan religion has made headway against phallic idolatry, the reaction has been so marked and the prejudice so intensified by religious conflict, that the disciples of Mohammed, not satisfied with simply concealing the female organs with raiment, keep their women wholly secluded from public observation. Even their faces must be closely veiled in public. So it seems that the Mohammedans have carried their crusade against phallic worship even further than we have, and consequently, if our prejudices and conventionalities in regard to the organs of propagation are well founded, should we, indeed, with our Bible, be behind those who reverence the Koran? If not well founded, will it not do in this age of comparative enlightenment to unite reason and philosophy with our religion?

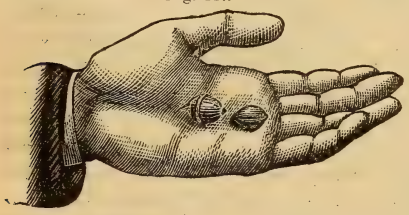
Although there is not a particle of danger of our ever adopting phallic worship, it may not be best for us to become so rude in our ideas of propriety as the pagans of old, or as our new acquaintances, the Japanese; but is it expedient to surround the organs of procreation with so much mystery, and maintain such studied silence respecting them in our social and moral intercourse, as to render men and women prudish, ignorant, morbid, and downright foolish, and our civilization a curse rather than a blessing to that portion of our race which accepts it? Will it not answer for us all, in this age of reason and Christian religion, to thoroughly know ourselves, and look about us without unnecessary restriction for the means for the promotion of our physical as well as our moral happiness? It seems to me there can be but one reply.

Next in order is the question—where may the public look for enlightenment in regard to those things which pertain to their sexual organizations, and that share of their social happiness in any way depending upon proper knowledge and use of them? May I not suggest in reply, medical and physiological works, written in language that everybody can comprehend? Imbued with this idea, and trusting to the good sense of an enlightened public, I have thus far in this work climbed no fences to get around, nor made bridges to get over what are popularly regarded as muddy currents, when I thought the best interests of my readers would be promoted by my wading right through. I desire that this work may be worthy the acceptance of the public as an encyclopedia of useful physiological knowledge for children and adults of both sexes.

Their Influence on Physical Development.

See here, reader: I hold in my hand an acorn and a plum-stone; little things no larger than the end of your thumb. Plant these in indigenous soil, and what do we find? From the acorn springs up a twig, slender and tiny at first. The sprout from the plum-stone is, if any thing, a stouter-looking sprig. The two grow side by side, and for some time an observer unacquainted with the characteristics of the two young sprouts would be as likely as any way to say that the little plum would be the larger and stouter tree in the end. Let us leave the pair long enough for them to develop. Years roll around, and we return. Lo! the twig of the acorn has become the "king of the forest!" You cannot, with the arms of another added to your own, span its immense trunk, and how scraggy its great moss-covered limbs! But what of the plum? In your surprise, you have not thought of it. Ah! Here it is: a beautiful and graceful tree; its limbs are shaped as handsomely as if the gardener had continually watched and pruned it. Its top is no higher than the first limb of its sturdy brother—the oak. The stately, the majestic, the moss-grown oak; the slender, the graceful, the mossless plum-tree!

Fig. 147.



THE SEED OF THE OAK AND OF THE PLUM-TREE.

Thus the two sexes of the human family grow up. In a group of children composed equally of boys and girls, there is at first no very remarkable difference in form or figure. Discerning people will distinguish correctly, but the world's blunderers are as likely to call the little black-eyed girl in pantalets, "Charlie," and the blue-eyed boy in petticoats, "Mary," as any way. Then, too, the little girls seem more hardy than the boys, as the plum sprig seemed stouter than the oak twig; and below the age of puberty the rate of mortality is greater among the young masculines.

Fig. 148.

IS IT CHARLIE OR IS IT MARY?

The age of puberty reached, mark the change! The two sexes seem now to develop in entirely opposite directions. The voice of the boy grows rough and deep;

his bony framework develops rapidly; his shoulders grow broader; the soft down of his childish face is fast turning to a heavy beard. Soon we shall see in him the sturdy, withy, and mossy characteristics typified by the oak. But with the girl all development of bone or any thing dependent upon earthy properties nearly or quite ceases when puberty is reached. True, a little prior to and for a while after, she widens at the hips. Why? Because on each side of the womb there rises upward and sideward a tubular arm, called the *fallopian tube*, with fimbriæ which might be likened to the ends of the fingers, and these grasp those important organs called the ovaries. (See fig. 142.) Well, these arms and these ovaries must have room; so, as the girl approaches the age of puberty, when the tubes and the ovaries must begin their labors, they demand elbow-room, and as the hard skull expands to the development of the brain, so the bony structure of what is called the pelvis widens, and it is consequently the generative organs of the woman that give her the peculiar breadth from hip to hip. But why does she grow physically fine, or what is called feminine, and the young man physically coarse, or what is termed masculine? I will tell you a secret, which the profession has not yet discovered; at least, I have never met with it in medical literature, and I claim for it priority of discovery.

It is this: The ovaries of women absorb and throw away those earthy and calcareous properties which go to develop bone, flinty hair, and coarseness of fibre; while the testicles of men secrete these properties largely, and send them to the seminal vessels, from which, if not expended in coition, masturbation, or involuntary emissions, they are re-absorbed, and go to build up the coarse or masculine physical characteristics. What is called ovalation in women, or, in other words, the generation of seed in the ovaries, commences at the age of puberty, whether sexual connection occurs or not. These ova are continually forming, and as constantly passing off; if not through the fallopian tubes and uterus, why then dropping into the cavity of the abdomen, from which they are absorbed and carried away with the waste matters. If dropped as last described, they cannot be re-absorbed as living material any more than the semen could be re-absorbed if forced by compression at the moment of emission into the bladder; or the blood of the bleeding nose returned to the circulation by injecting it into the nostrils. The ova, or eggs, once detached from their ovary, must go to waste unless met by the zoösperm of the male, and held in the uterus to form offspring. Then, during pregnancy, the ovaries cease their periodical waste of the earthy matters by arresting the process of ovalation, so that the developing fœtus may draw from the pregnant woman the material whereby to build up its cartilage, its bone, and its scalp of hair. This cessation of work on the part of the ovaries usually continues, too, during the period of

nursing, when the food of the infant must possess its due supply of calcareous matter, and it is found by analysis that the ashes of the milk of women contain phosphate of lime, chloride of potassium, phosphate of magnesia, and phosphate of iron. At that period of woman's life when ovalation ceases, her physical characteristics have become too fixed to be materially changed by the arrest of the calcareous waste: although in perfect health, it is noticed that she does grow more muscular, and in some instances it may be observed that the upper lip becomes somewhat bearded after what is called "the change of life."

Analysis of the semen of the male tends to sustain the foregoing theory, for, according to Vauquelin, it contains "900 parts of water, 60 of animal mucilage, 10 of soda, and 30 of calcareous phosphates." Observation of effects of the retention or loss of this fluid also sustains it, for, when by masturbation, sexual excess, or involuntary emissions, young men sustain a frequent loss of semen, they become effeminate, timid, less firm in bone and muscle, and generally less hairy about the face and body. Even the voice, in some instances, becomes less masculine.

Then, again, observe the effects of the removal of those little organs which in the male economically save and return to the system when wanted, the calcareous or earthy matters, which they largely secrete. In Italy, in the eighteenth century, about four thousand boys were annually castrated for opera singing, and celebrating the mass! Why? Because the operation arrested the full development of the masculine voice.

Without the ovaries of women to waste the coarser properties, their vocal organs became stronger and larger than women's; and consequently more efficient for singing those parts in music usually allotted to the female voice; but, without testicles to act as savings banks to the masculine properties, so that any part of the body could be supplied by "drafts payable at sight," the vocal organs could not obtain that development which gives to the voice of uncastrated men the intonation of heavy bass. These boys, too, grew up beardless, having more down than women, but none of the flinty beard so peculiar to men who have not lost the acorns of their manliness.

Analysis of the contents of an egg also sustains my theory. The egg of any animal—fish, reptile, or bird—contains a large percentage of phosphate of lime, carbonate of magnesia, oxide of iron, and sulphur. I am not aware that any analysis of the egg, or ovum of the human female, has been made; but, under the microscope, its organization presents about the same appearance as that of the egg of other animals, whether viviparous or oviparous, even to containing a yolk; and it probably differs little, excepting in size, and in the quality of its animal matter.

The effects of the loss of the ovaries on the viviparous animals is analo-

gous to those happening under the same circumstances to women. Hens losing their ovaries by disease or accident, are known to acquire tail feathers and spurs like the cock, and often to crow pretty well. I recollect meeting with one of these masculine hens in my boyhood, and I have heard of others. It is a fact known to naturalists, that in many instances female birds, after passing the age of fruitfulness, acquire the plumage and characteristics of the male. Women losing their ovaries, by disease or surgical operations, become, if the loss occurs at an early age, quite masculine, acquiring a heavy down upon the upper lip, and sometimes upon the cheeks. The voice and other characteristics also become more masculine. In all cases of women having much hair upon the upper lip, the ovaries or seed-generating organs are comparatively inactive, although, in many instances, their amative instincts are more intense. When amativeness is abnormally increased, and the activity of the ovaries diminished, in early womanhood, the masculine characteristics are not only more prominent so far as relates to muscle, bone, beard, and voice, but the breasts flatten and the clitoris obtains unusual size. I have met with a few cases of this kind in my practice, and I find, by investigation, that some centuries ago this species of deformity was so common in Egypt and Arabia, that the surgeons made a practice of amputating a portion of the clitoris. It became in some instances as large and prominent as the male organ. On the other hand, castration of the male develops the breasts.

The practice of spaying female calves, or heifers, as they are called by the farmers and stock raisers, is practised in portions of Canada and elsewhere, for the purpose of making working cattle of them. Spaying, it should be understood, is the act of removing the ovaries, or destroying them. When thus operated upon, the organs which secrete and excrete, or throw away, the calcareous properties being removed, they grow more bony and muscular, and even their horns take more of the form and likeness of the stag. I am informed by a medical man to whom I have read a portion of this essay in manuscript, that he once saw a yoke of cattle composed of a male which had been castrated, and of a female which had been spayed, and that they appeared to be physically what are generally known as "matched cattle." This would be the natural result, for the absence of the ovaries of the female would prevent the castrated male from taking on all the characteristics of the female, and the absence of the testicles of the male would prevent the spayed female from developing all the characteristics of the male, and the two would consequently meet at a point of physical development intermediate between a bull and a cow. The reader can apply my philosophy to other animals castrated or spayed while young, and find that facts sustain my theory. There are innumerable opportunities to carry out or test the correctness of my philosophy, for it is no new discovery that castration and

spaying make the subjects on which the operations are performed more alike in their physical development; many are fully aware of the fact, but no one, so far as I am informed, has ever before attempted to account for it. It is left to the good sense of the reader to decide if I have not succeeded in doing so.

Their Influence on Health.

The divergent physical growth of the respective sexes caused by the influence of the sexual organs as explained in the preceding essay, if investigated fully with reference to its ultimate as well as proximate results, explains the phenomena of sexual attraction. The spiritual aura of two such distinct organizations must be correspondingly as unlike as their physical bodies. Before the age of puberty, and consequently before the testicles of the male begin to impart marked masculine characteristics, and the ovaries of the female the work of eliminating the coarser physical properties, the attraction between them is almost wholly platonic, and their mutual attentions and juvenile gallantries mainly in imitation of what they see going on between the older ones; but after arriving at puberty, and the machinery of sex begins its work in each, the delicately organized girl begins to feel like leaning against the broad shoulders of some favorite of the opposite sex, and absorbing from him the masculine magnetism which emanates from breath of lung and pore, and he, in return, drinks in her sublimated electrical aura, which his coarse physical

Fig. 149.

THE MALE. THE FEMALE.

organization is incapable of generating. All you who, blessed with health, "have crossed the line"—passed the age of pubescence—know all about this from experience, and I need not multiply words in any attempt to describe the desires, the emotions, the sensations which suddenly took possession of your whole being. I will simply remind you that the magnetism which emanates from a true representative of each sex, is as unlike in quality as the voice of each is dissimilar in sound. From which may be made the following deductions:—

First.—Women need the magnetism of men; it strengthens them; it supplies something their peculiar organizations are incapable of producing. Physicians who have never for a moment stopped to inquire why, recognize this fact, and often tell frail, debilitated, too effeminate young women, "My advice to you is, get married," and many who read these pages can bear witness with me that this advice, judiciously taken, by the selection of a truly congenial companion, has saved a multitude of young women from debility and early death. No doubt, too, instances will arise in the mind of nearly every one, in which young women in declining health have suddenly exhibited physical improvement, when Madam Gossip began to rumor it about that this Miss Somebody had a beau.

Secondly.—Man needs woman's magnetism; without it his surplus masculine elements either petrify and make him intolerably coarse and boorish, or they drive him to solitary vice and ultimate decay of his masculine qualities, if not, indeed, to final imbecility. How often physicians advise young men to marry, because their pent-up masculine elements have swept away the dam, carrying away, involuntarily, not only the calcareous or earthy properties of their semen, but the vital—I may almost say brain matter—which it possesses, and which cannot consistently with health be expended thus wastefully. This is not always good advice, for it is better to repair the local weakness first, unless proper attention be given to it immediately after marriage, which precaution is too apt to be neglected under the supposition that natural indulgence will overcome the difficulty, while it too often simply conceals it.

Lastly.—The sexes need the magnetism of each other not simply for the benefit resulting from the interchange, but because there is good reason to believe that the union of male with female magnetism actually creates magnetism. That is, this union of the two distinct elements reproduces magnetism just as the union of the male germ with the female germ reproduces the human being. I know this is an hypothesis which is not perhaps, demonstrable, but it is a fact that may not have escaped the observation of some and the experience of other readers, that two bloodless and unmagnetic persons of opposite sex, if congenial, emerge from social or sexual intercourse, filled with a magnetic power and vivacity which they did not pos-

sess before. It is more apparent after the latter, if the union takes place between persons temperamentally adapted. It is, therefore, unfortunate that the demands of nature, and the fiat of custom, are so widely at variance. Nature makes known her want usually under the age of fifteen, while custom in our civilization holds the sexes apart from six to ten years thereafter; long enough to make women feeble, sexually apathetic, and disqualified to become satisfactory companions or healthy mothers; long enough to make our boys coarse, rakish, or imbecile, and in marriage the fathers of puny children. In our large cities, and to a considerable degree everywhere that our civilization extends, we have reached an era when a young woman is left to select for her husband one who is weakened by solitary vice, or poisoned with syphilis; when a man may take for a wife a buxom widow, or a frail, breathless young virgin. Perhaps this last statement may appear somewhat exaggerated; but, if not always frail in appearance, pray how many young women can you find in fashionable society who are physically sound?

Free social intercourse between the sexes, when not too greatly trammeled by excessive notions of propriety, may do much to promote that exchange of magnetism between them so essential to physical development and sweetness of temper. Nature has, however, provided the true conductors to this interchange, which are as perfectly fitted for their function as the eyes are suited to convey to our minds the form and color of surrounding objects; the ears to gather up atmospheric vibrations, and make us conscious of sounds; and our stomachs to digest the food which rebuilds our constantly decaying bodies. Nor are those organs in health and cleanliness, and under circumstances which permit their normal exercise, one iota less beautiful, respectable, or less conducive to our enjoyment. The rude caricatures of them in ivory, stone, and pottery, as fashioned by the pagans of old, produced prejudices in the minds of our religious ancestry which have been transmitted by inheritance to us; in childhood those prejudices are revived and are fed to us with our milk; in adult age they are quickened to activity by uncleanliness, disease, and excessive sensuality. Who is to blame—God, who modeled the human body, or his ignorant, erring, dissipated, and diseased children, diseased no less in imagination than in body? When shall we enfranchise ourselves from the "body of this death," open the windows of our souls to the light of God and Nature, and allow our understandings to become impressed with the true uses of things?

There are those who professedly, I think not sincerely, advocate the entire suppression of the passions; but it must occur to every philosophic mind that the passions are an integral part of the individual. It is pleasant to hear from the pulpit sentiments which may profitably find place in a physiological work. Clergymen ought all to be physiologists. There should be on

one side, an anatomical, and on the other a physiological *wing* to every theological seminary, and no student should be allowed to graduate until symbolic of his *alma mater*, the wings of physical knowledge have sprouted on his theological body, But let me make haste to present for the consideration of the reader a couple of paragraphs from one of the sermons of Henry Ward Beecher. You all know him, and posterity will honor his memory.

"That inward life is not from a part of the faculties but from all of them. Whatsoever," remarks Mr. Beecher, "belongs to man, belongs to God in Christ. It does not, for instance, partition off a few moral faculties, and call their products religion, and set them to watch the rest of man, calling that secular. It is the current and popular notion of Christianity that there is some part of the soul which is capable of being religious, and that the rest is an outlying province which the religion is called to govern—a sort of consular district, with consuls and pro-consuls of God's Spirit appointed to look after it, and see that it does not break out into insurrection, and do the best they can by it. But Christianity claims every part of man. The religion of the individual includes the sum total of the action of every part of his nature."

"The soul," continues this popular preacher, "is a symmetrical whole. There is nothing superfluous in man; if he were to be made again, he doubtless would be made as he is. Man's faculties are well constructed. The fault is not in the faculties themselves, but in the use of them. Every part is needed. In religion are included, not the moral feelings alone, but also the imagination; and not the moral feelings and the imagination alone, but also the reason; and not the moral feelings, the imagination, and the reason alone, but the affections; and not all these combined alone, but all the organic passions and physical appetites; subordinated, controlled, applied to normal and proper ends; but, nevertheless, the passions and appetites. For a man without his appetites and passions would be like a man pulled up by the roots. As long as a man lives on the physical globe, and is dependent upon a physical structure to think, feel, and act in, so long he must have appetites and passions. They are not averse to grace in their true function; and religion claims, not just so much of the mind as is called the religious faculties, but the whole soul and all its parts."

The foregoing paragraphs contain in two small kernels all the food perhaps that reflecting minds require for mental digestion under this head, but I will grind them up and make a penny cake for one, a biscuit for another, and a whole loaf for those who are ready to receive it.

There are those, as remarked before, who profess to believe that the human passions should be completely subdued, and, if possible, rooted out. Asceticism has had its votaries in all ages of the world, and presents itself to-day in a variety of forms not free from inconsistency, in nearly every

community under the sun. Now, according to phrenology, all the organic passions have their bumps behind the ears, and those who do not accept phrenology as a science, must admit that a large cerebellum denotes strong passions. Root out the passions, if such a thing were possible, what would be the result to the physical man? A small cerebellum and diminutive lungs. As a rule, you will observe that those having prominence in the intellectual organs without a fair development of the head back of the ears, have contracted chests; while those who have large back heads have broad shoulders and large lungs: therefore, if it be possible to crush out the passions, and you succeed in doing so, you shall find the human race reduced to a puny condition physically, and not only that, but to a mental condition devoid of propelling power, for these faculties are necessary to impart energy to mind and body. Look about you, analyze the developments and characteristics of your neighbors, and see if I am not correct.

The Divine Architect intended that these organs should be preserved, or they never would have been assigned a place in the human organization; as well talk of abbreviating the arms or amputating the limbs of a man in obedience to a supposed divine law, as to propose to dwarf the development, or paralyze the normal action of these faculties! All of them may be exercised without harming your neighbor; it is a perverse use of them that leads to disorder, disease, and unhappiness. The organs of "combativeness" and "destructiveness" find their proper field of labor and usefulness in attacking and demolishing popular errors, and as the human race rises to new light, there will ever be something old to destroy to make room for something new and better adapted to the wants of the times. These organs are misapplied when they lead men to pummel each other in or out of the prize ring, and to the needless destruction of life. Amativeness may be employed in developing and gratifying naturally the social and affectionate instincts; in imparting to woman the strong magnetism developed by man; in modifying the masculine elements of man with the spiritual aura of woman; and in making both sexes healthier and happier. It is an escaped tiger from a menagerie when it takes on the spirit of selfishness, and seeks the gratification of its impulse without regard to the happiness and the rights of others; and a monster without name when it leads to unnatural indulgences, such as self-abuse, pederasty, and connection with lower animals. Philoprogenitiveness finds its most admirable exercise in prompting the production, and sensible moral and physical development of children; it becomes disorderly when it willfully plants the germ of a new being in the womb of an unwilling companion, and verily cruel when it attempts to propagate children through the instrumentalities of sickly progenitors.

Thus all the natural passions have their uses and abuses. There are some unnatural passions and emotions which have no distinctive location or

"bump" in the brain, and which it should be one of the chief labors of life to root out. Prominent among these are jealousy and envy; and *selfishness*, which is the mother of these troublesome twins. They are weeds of rank growth, and when they once get seated in the organs of thought and emotion, they choke and dwarf the development of the moral and social faculties.

There are two very distinct and opposite classes of people who need especial criticism, and all sorts of folk between them. One consists of those who give little thought or attention to any thing else but their appetites, and consequently run to sensuality and coarseness; the other of bloodless debilitated men and women, who are absolutely running to moral and intellectual seed. They grow up like a flower, with a single stem, drooping at the top for the want of support. As the first class are being constantly lectured by the clergy and exemplary—and unexemplary—laity, I will direct these words to the neglected class last mentioned.

You feeble women and men give yourselves up too exclusively to moral or mental pursuits. You have but little blood, and that congests your brain, leaving your extremities cold and your digestion weak; all activity is concentrated in your head and heart to the manifest detriment of other portions of your physical body. It is necessary that you proceed at once to develop your animal nature. Your appetite is poor, because your stomach is weak; you cannot, therefore, begin by crowding your stomach with undesired food; you may, however, advantageously vitalize your nervous system with sexual magnetism; sexual association, and, when honorable, possibly sexual gratification, to a reasonable extent, will divert the blood to the extremities; the social intercourse which this change in your habits must inevitably encourage, will make your mind more cheerful and life more enjoyable. With this distribution of your circulating fluids, this mental cheerfulness, will follow appetite for food. Having obtained this healthy equilibrium, take care to preserve it. Neither gravitate toward coarse sensuality, nor relapse into your former non-vital condition. Either extreme is prejudicial to health and fatal to happiness.

Owing to the peculiar customs of society, females are the greater sufferers from sexual starvation, and in this connection I cannot do better than to make an extract from Dr. Oliver Wendell Holmes' "Autocrat of the Breakfast Table." "The great mystery of God's providence is the permitted crushing out of flowering instincts. Life is maintained by the respiration of oxygen and of sentiments. In the long catalogue of scientific cruelties there is hardly any thing quite so painful to think of as that experiment of putting an animal under the bell of an air-pump, and exhausting the air from it. (I never saw the accursed trick performed. *Laus Deo!*) There comes a time when the souls of human beings—women, perhaps, more even than

men—begin to faint for the atmosphere of the affections they were made to breathe. Then it is that society places its transparent bell-glass over the young woman who is to be the subject of one of its fatal experiments. The element by which only the heart lives is sucked out of her crystalline prison. Watch her through its transparent walls; her bosom is heaving, but it is in a vacuum. Death is no riddle compared to this. I remember a poor girl's story in the 'Book of Martyrs.' The 'dry-pan' and the gradual fire were the images that frightened her most. How many have withered and wasted under as slow a torment in the walls of that larger Inquisition which we call Civilization!

"Yes, my surface-thought laughs at you, you foolish, plain, overdressed, mincing, cheaply-organized, self-saturated young person, whoever you may be, now reading this—little thinking you are what I describe, and in blissful unconsciousness that you are destined to the lingering asphyxia of soul which is the lot of such multitudes worthier than yourself. But it is only my surface-thought which laughs. For that great procession of the UNLOVED, who not only wear the crown of thorns, but must hide it under the locks of brown or gray, under the snowy cap, under the chilling turban—hide it even from themselves, perhaps never know they wear it, though it kills them—there is no depth of tenderness in my nature that pity has not sounded. Somewhere,—somewhere,—love is in store for them; the universe must not be allowed to fool them so cruelly. What infinite pathos in the small, half-unconscious artifices by which unattractive young persons seek to recommend themselves to the favor of those toward whom our dear sisters, the unloved, like the rest, are impelled by their God-given instincts!"

In concluding this essay, I will refer those who are disposed to pursue this subject further, to the article on "Sexual Starvation," on page 164, if Part I. has not already been perused by the reader.

How they are made the Instruments of Pleasurable Emotions.

I have already shown, in Part I. of this work, and particularly in the second chapter of the beginning, that electricity permeates every atom of animate as well as inanimate matter, and that every organized being possesses within itself the requisite apparatus and elements for its generation and absorption. The office of this essay will be to show how it acts upon the sexual organs, to produce sensual enjoyment. I shall employ the word electricity in this essay, because it will better convey to the mind, by the illustrations given, a clear idea of the philosophy of sexual intercourse. The word magnetism has been in previous, and will be in subsequent, essays, employed when it best answers the purpose of making the subject understood to the non-professional reader. Electricity and magnetism are not precisely alike in their nature and effects, but I have neither time nor

space to enter into an explanation of their distinctive characteristics, nor is it necessary, for the reader will know when I employ either term in speaking of its action in the body, I refer simply to that invisible element which gives activity to all its organs, and makes it radiant with life, and attractive or repulsive to other bodies coming within its influence.

To the pure in mind this dissertation will appear neither carnal nor uninstructive, for no parts of the human system are more deserving the attention of philosophers, physiologists, and the public at large, than those which perform the superior functions through which the Divine Creator establishes sexual love, and perpetuates the noblest work of his Almighty hand. In consequence of the silly fastidiousness which a false state of society has engendered, science has heretofore contributed nothing toward unfolding the philosophy of the action of these mysterious faculties, and knowing the prejudices which frequently arise against those who dare to meddle with the delicate subject, I have myself felt many misgivings in giving publicity to my views; but surrounded, as I am, with wrecks of humanity, cast away through the ruinous consequences of matrimonial infidelity, sexual excess, and secret vice, I feel impelled to contribute what I can to avert these evils.

The warnings of physiologists to the young have thus far availed little, if any thing, because good *reasons* have not been adduced to show that secret indulgences are more deleterious than natural gratifications of the amative passion, while little has been written argumentatively at all calculated to root out matrimonial vices. I shall not, therefore, withhold the results of my careful investigations, but give them plainly for the good of both single and married.

To the end that the unprofessional reader may fully comprehend what I am about to say, an important physiological fact should be mentioned, viz.: *no organs of the body, except the brain, are so extensively permeated with nerves or electrical conductors, as those embraced in the sexual parts.* Located in close proximity to the plexus, at the inferior terminus of the spinal column, they receive an extraordinary share of those curious little cords, which, by the aid of animal electricity, impart to the animal organization the sense of feeling. In the act of cohabitation, these sensitive nerves are exercised by electricity in three forms; and in masturbation by electricity in only one form. I will now proceed to explain each of these several forms, under their appropriate heads.

1st. Individual Electricity.—The fact that every animal body has within itself the requisite machinery for the generation of vital electricity, does not necessarily establish the conclusion that electricity is alike in capacity and equality in all persons. On the contrary, it would be preposterous to entertain such an idea for a moment, when we take into

consideration the difference which exists in size, shape, solidity, activity, age, and sex. The inference is irresistible, that people differ electrically as much as they do physically. This being a fact nearly or quite self-evident, it is apparent that two persons of different sex and temperament sustain the electrical conditions of positive and negative to each other, and that contact, if of sufficient duration, produces an equilibrium, unless the one possessing the greater amount, restrains it by the action of the will. Electricity, unless interrupted, seeks an equilibrium the same as water seeks a level. The mind having control of its own agent, may sometimes retain it, and at others discharge it with an effect as perceptible as that produced by the discharge of a cannon-ball.

The power of individual electricity is manifested by the magnetizer, who fastens a man's limb so that he cannot move it, his eyelids so that he cannot raise them, and his tongue so that he cannot speak. Probably every reader of these pages has witnessed the experiments of a mesmerizer, and marveled at his peculiar powers—perhaps imagined, uncharitably, that he was leagued with the devil—inwardly accused him of being, at least, a devout disciple of "his Satanic Majesty." Unfortunately for themselves, mesmeric operators, so far as I know, cannot philosophically account for the powers they possess, and hence superstitious people very naturally imagine they are under the direct patronage of that ubiquitous individual—"the evil one." But I flatter myself that I have discovered the secret.

It must be remembered that in an audience of two or three hundred, a mesmerizer seldom finds more than fifteen or twenty whom he can affect. These, let it be understood, are in a condition relatively *negative* to the operator, who, by the effort of his will or sundry manipulations, imparts an overpowering quantity of his own individual electricity to them. Imparted to these subjects, the operator still retains the control of his own individual electrical elements, and by a simple effort of the will makes them walk, stand still, hold up a hand, raise a limb, or perform any other motion he may desire. How do you raise your own hand? Simply by setting in motion a current of your vital electricity, which contracts one set of muscles on the top of the arm, and relaxes those which are under. Now, if you should practise yourself in the art of imparting to other persons, in a negative condition compared with your own system, a portion of your own electricity, sufficient, at least, to overpower theirs, you could soon become a mesmerizer, and make them, while under the influence of your electricity, raise an arm, hold it still, or produce any other motion that you can perform with your own limbs.

The psychologist possesses this power to a greater degree than the mesmerizer, for he can impart his electricity to the brain of a susceptible sub-

ject, and by exercising its various organs, produce any sort of mental hallucination he may invent.

"Should you aim to produce those effects of mind upon mind called 'psychological,'" says a writer, "it will not be necessary to go through the tedious process of the passes. If you can succeed in rendering the mind of your patient so fixed for several moments upon a coin or a spot on the wall, or any point—it matters not which, provided that he brings himself to the requisite degree of susceptibility—you will be able to slip your *influence* between his brain and his physical system, and so be able to control his sensations and perceptions. If it is desired that you make him believe himself an orator, musician, or monk, have in your mind a clear conception of the character, and make an effort to *impart* the impression."

Now, what is this *influence* but the nervo-electricity which the immortal principle of man employs to perform the various phenomena of animal life?

Mesmeric power is possessed to a wonderful extent by some persons, who can impart their nervo-electricity to inanimate matter, and make it exhibit the appearance of life for a few moments. I can never forget an experiment I once saw performed before I understood the philosophy of mesmerism. I was on a trip up Lake Michigan. A veteran vessel captain was a fellow-passenger—a jolly tar, full of good jokes and anecdote. I formed one of a social group who gave him audience. I had a favorite hickory cane in my hand, and the old captain proposed to make it dance "Yankee Doodle." The deck was cleared sufficiently to allow room for the incredible exploit, when the old necromancer (as we all thought him) made several rapid passes from the top to the extremity of the stick—then stood it off at a distance of three or four feet. He immediately commenced whistling, and the cane commenced dancing—*i. e.*, hopping up and down a distance of half to three-quarters of an inch. It performed this motion only a few moments, however, not long enough for the captain to go through with his tune. His music was accompanied with a violent motion of the hand, which the cane imitated, in a measure, just so long as it remained charged with the old man's electricity; when that left, as a matter of course the stick, in obedience to the laws of gravitation, fell. At each repetition of the experiment he stopped to manipulate the cane. It is not at all probable the old tar knew the philosophy of his feat, or for a moment imagined that he possessed the requisite qualities to make a good mesmerizer or psychologist. The oldest hieroglyphics indicate that the production of mesmeric phenomena was known to the ancient Egyptians long before any book was written. Perhaps their philosophy was understood, though it is doubtful.

The power of individual electricity is manifested in the successful public speaker, and distinguished military hero. "Every age," says a newspaper writer, "has exhibited manifestations of man's electric powers. Behold

the generals of Greece and Rome! See that untutored enthusiasm which but a few words to the soldiers would create with manifestations of a magnetic power of man over man. Behold, too, in the force of Napoleon Bonaparte, an illustration of the same principle. Even a movement of his hand toward the enemy, when the conflict was doubtful, seemed to beget new energies.

"Take another class in a different field. Imagine yourself in the forum at Rome, listening to the soul-stirring eloquence of Cicero. Behold that living mass of minds swayed by his magnetic power as the bosom of the deep is tossed by the winds of heaven—made to heave and swell with agitation and commotion. See the more mild and pathetic and elevating appeals of his eloquence calming their troubled bosoms like the sun bursting from a storm-cloud and calming its fury.

"At the moment when his soul was inspired by its own energies and the inspiration of his theme, his whole system evolved an immense amount of electric force. He should say more in ten minutes in that condition than in an hour—yea, two hours, and sometimes four hours, in a negative state."

But we need not go beyond the limits of our own country or turn to past ages for illustrations. We have had in our Congress, our army, and in our pulpit, men who have soared head and shoulders above all the rest, all of whom have given evidence of the possession of electric powers to an eminent degree. No man can distinguish himself as a public speaker, or a military chieftain, whose system has not the power to generate a large quantity of the electric element.

There are in the Christian ministry many distinguished sermonizers and writers, who can produce only an imperceptible effect on a congregation. Let such a man as Ned Forrest, who is a well-charged electric battery, take the productions of these men and enter the pulpit, out of place as he would be, the effect would be thrilling. He would psychologize every auditor. Reichenbach, it is said, has demonstrated that the hands are constantly sending off streams of what he calls "Odic force," and what I term animal electricity; also that the eyes are foci for this influence. "Odic force" is but another name for electric force, sublimated animal electricity being the element which constitutes it.

The power of individual electricity is manifested in the successful libertine. His presence, his gaze, and his touch are magnetic. The innocent virgin and the reserved matron unconsciously fall victims to his singular powers. Aaron Burr was a distinguished illustration of this class. He could electrify and call into action the most latent passions of apathetic women; only those who possessed a powerful *will* to repel electrical influences could resist his licentious advances.

All great men may be successful libertines, by perverting their electrical

powers. The mental or phrenological organization of a man decides his electrical character. If his intellectual faculties predominate, he will employ his electric forces in the pursuit of honorable avocations and professions; if the intellectual and animal faculties are nearly equal in their development, then will he make both good and bad use of these forces, unless the brain is well balanced with the moral and religious organs; if the latter are small and the animal organs are larger or more active than the intellectual, then will the man use the subtle element generated in his system in vicious pursuits. John Randolph's head was mainly before his ears, in consequence of which he had no disposition to use his electrical powers for sensual purposes. Indeed, he was said to be a "woman hater." Many of his political compeers, however, presented very different phrenological organizations, which, in some instances, produced a marked and injurious influence upon their distinguished career.

Fig. 150.

RANDOLPH.

Again, the power of individual electricity is manifested in social life. We often meet with persons of both sexes, whose features and forms are not pretty, nor their mental endowments striking, but still very attractive. We say of some lady, "She is very fascinating, but not at all handsome; there is something about her very agreeable, although she is far from being mentally or physically prepossessing." Now, what is this mysterious *something* but her individual electricity which she unconsciously uses in commanding the respect and admiration of her acquaintances? She, in fact, magnetizes every one she meets, and makes them admire something, and they do not know exactly what. Others are repulsive at first sight. Their magnetic influence is unpleasant, and we dislike them without being able to give a definite reason. They cannot magnetize us into respect for them, and the electrical radiations from their bodies and minds are uncongenial to our feelings.

Finally, individual electricity is strongly manifested in the sexual embrace, when the masculine and feminine forces are focalized and blended in the sensitive nerves which concentrate in the sexual organs. In a *congenial* embrace, the mind of each party summons all the available electric powers of his and her organization, and employs them to the fullest extent in exciting in each pleasurable emotions. The greater the dissimilarity in the nature of their individual electricities, the more satisfying is the effect. Hence, persons of similar physical organizations, whose electricities, in

consequence, are of a similar nature, have not the power to gratify each other to the extent those have whose temperaments are unlike. Some persons are so dissimilar in their physical organizations that any contact, such as the shaking of hands, imparts to each a pleasurable magnetic effect. The reader should peruse with attention this essay on individual electricity, as it is the basis of some of the most important original theories and suggestions of this volume.

2d. Chemical Electricity.—I term that chemical electricity which is produced by a galvanic battery, a voltaic pile, or the union of acids and alkalies. I have explained in Part I. that experiments have proved the fact that if an acid and alkaline solution be so placed that their union be effected through parieties of an animal membrane, or through any porous diaphragm, a *current* of electricity is evolved. Now, what is it that affords the *current?* simply the porous diaphragm. But what produces the *electricity* which forms the current? I reply, the union of the acid and alkali. Then the interposition of the diaphragm is only to establish a medium for a definite current, while electricity is *produced* by the commingling of acids and alkalies, whether a porous diaphragm intervenes or not. This leads us to the conclusion that electricity is produced when tartaric acid is added to soda, the latter being an alkali, and that it is altogether probable the titillating effects of a glass of soda are produced in part by the electricity generated by the combination of a positive and negative fluid. I know the effervescent property is claimed to be produced by the liberation of carbonic acid; but Dr. Bird says, "*it is impossible that any two elements can be rent asunder without setting free a current of electricity.*" In the commingling of acid and alkali, the carbonic acid "is rent asunder" from the elements with which it was united; and may we not then attribute a part of the visible effect produced to the electricity generated?

Admit that electricity is generated by the union of acid and alkali, and we find that chemical electricity is produced in the act of copulation. It has been shown, in the first chapter of this work, that the whole extent of the mucous membrane, excepting the stomach and cæcum, is bathed with an alkaline fluid. The vagina of the female is superabundantly supplied with this fluid. And, also, that the external surface of the body is constantly exhaling an acid fluid. The penis of the male, except the glans-penis, exudes an acid fluid; and in the act of copulation, I am inclined to think, the secretion of the alkaline fluid by the female, and the exudation of the acid fluid by the male, is greatly augmented. I have before adverted to the pleasing sensations produced in the mouth and on the palate in drinking a combination of an acid and alkali, called soda; now, what must be the effect produced on the sensitive and highly excited nerves in the sexual organs, when animal alkalies and acids are united? True, these fluids are not sup-

plied in sufficient quantities to produce any marked effect; but still the electricity so generated adds to the excitement of the sexual organs, and the emotions induced. In order that the male may not be insensible to the influence of the chemical electricity generated during copulation, the male organ is supplied with a sensitive membraneous apex called the glans-penis, which not only serves this purpose well, but also constitutes an electric, as will be shown by and by. Our investigations thus far, therefore, indicate that individual and chemical electricities are employed in the act of copulation. Next we will consider—

3d. Frictional Electricity.—This may be produced in various ways. The rubbing of a piece of glass, amber, or sealing-wax, with a piece of flannel, silk, or fur, will so charge the former with electricity, that, when held near light bodies, they will be attracted and adhere to them. Many persons, by sliding the feet with rapidity over a Brussels carpet, can accumulate so much frictional electricity in their bodies, as to be able to light gas by snapping the fingers over the burner of a gas chandelier. I have a relative who frequently performs this interesting experiment. He can also administer quite a perceptible shock with electricity thus accumulated.

"It is a general truth," remarks a Lowell newspaper, "that friction develops electricity, and most workmen know that a machine belt at high speed by its friction with the air is highly electrified. It has for years been a common experiment for a workman to light gas-burners by holding one hand to a fast-going belt and the other to the open burner. This matter was curiously demonstrated in the Appleton Mills of this city recently. A strong smell of fire being noticed, the premises were carefully searched, and a small quantity of cotton lint, inside a belt casing, was found on fire. The lint lay upon a beam which was within four inches of a belt some fifteen inches wide, and moving some two hundred and twenty revolutions a minute. In the beam was an iron bolt, the head of which was toward the belt. From the belt to the bolt was passing a stream of electric sparks, which had set the cotton lint on fire. After attending to this case, Mr. Motley, the agent, opened the casing of a similar belt in another mill. The beam in this case was fourteen inches from the belt, but the stream of electric sparks was at once seen jumping across the beam, although it had not set fire to any thing."

Frictional electricity may be produced by rubbing the hands together with rapidity, or by rubbing any part of the body. Every external part of the system may be, in a measure, electrically excited by rubbing; but no part of the animal organization is so susceptible to this influence as the glans-penis of the male and the clitoris of the female. It is by the excitation of these organs that masturbation is performed—a vice which is daily ruining the health of thousands of young men and women. They think that the

warnings of physiologists are only intended to frighten them—that occasional secret indulgence is no more injurious than sexual intercourse. To the victims of this vice let me say, that in the act of masturbation, only one form of electricity is employed, and that *is drawn from the nervous system* and returned with frightful loss. Nature designed that the generative organs should be acted upon by individual, chemical, and frictional electricities; you employ only the latter, and that is not *produced* but extracted from your nervous organizations. In a natural gratification of the passions, the electricity produced by the commingling of the animal acids and alkalies, coition and the interchange of individual electricity, compensates the nervous systems of both sexes for any losses which would otherwise be sustained.

The pubes, I am disposed to think, are useful in perfecting the curious electrical machinery of the generative organs. Hair being a non-conductor of electricity, may aid in confining the element generated and exchanged during the act of coition, to the sensitive nerves; or, in other words, serve to insulate the external parts of the sexual organs. Every thing has been created and given its appropriate place for some wise purpose, and this may be the office of the pubes. Be this so, or not, the generative systems of both sexes are the very perfection of divine mechanism, admirably adapted to the purposes for which they were created. Ignorance of their philosophy and physiology has ever led to their serious perversion, both by the married and unmarried. In this case, ignorance is not bliss, nor wisdom folly. Mankind should learn to make good use of them, but knowledge so desirable cannot be obtained unless their philosophy is correctly understood. For this reason I have indited this essay.

How they are made Instrumental in Perpetuating the Race.

In the opening of this essay, let me say to the reader that the amative or sensual function of the sexual organs is really separate and distinct from the procreative. This fact is not announced for the first time in this place, but was first promulgated, I believe, by the Rev. J. H. Noyes, founder of the Oneida Community. It stands out as a self-evident fact the moment it is presented. On one side, at least (the female), impregnation often takes place without amative excitement; some men affected with seminal weakness or involuntary losses of semen, if the spermatozoa be viable, may impregnate women by simply momentary connection, without remaining long enough to induce pleasurable emotion. These are facts well known to the observing and experienced of the profession. In the fishes the distinctive character of these two functions is more marked, for their pleasure is simply in the emission—the female, of her eggs, and the male, of his impregnating germs; there is no physical connection between the male and

female at all, and unless the former emits his germs among the deposited eggs of the latter, reproduction cannot occur.

In man, the organ which administers to the amative pleasure is the penis, acted upon by the three varieties of electricity, as explained in the preceding essay. The testicles are the organs which generate the male germs, and do not actually participate in the sexual congress, having previously supplied their repositories—the seminal vessels—with the spermatic secretions.

In woman, the clitoris and the erectile tissue of the vagina are the parts, which, when acted upon by the electricities already referred to, induce sexual enjoyment. The ovaries are the organs which produce the female germs, and they do not participate in the pleasure of the copulative act; the womb does, in a slight degree, but its cavity is simply the chamber wherein the ovum forms an alliance with the zoösperm.

Sexual connection may therefore be enjoyed to a limited (the Oneida Community says to the fullest) extent, if both parties are healthy in their organs, and disciplined to control, without involving at all the function of reproduction; it is nevertheless true, that the reproductive function cannot be normally performed by the male without the aid of the amative function. But Mr. Noyes considers the amative function as much higher than the procreative, as the latter is more exalted than the urinary function. As an illustration of the views of his school of philosophers regarding the moral character of sexual intercourse, when separated from dishonor, excesses, and the usual evil concomitants attending it among the depraved and vicious, I will copy a paragraph or two from a communication published in their organ—"The Circular."

"I believe," says the writer, "that sexual fellowship is an act which relates the parties not only to each other, but to the universality of sex, and principally to God himself. The Creator being shown by every law of analogy, as well as by the declarations of the Bible, to be a duality—the original type of the male and female form—it is the vibration of love and attraction at that fountain-head of life which echoes and repeats itself in all the forms of sexual attraction throughout the universe. Is it asked how this is proved? I did not say that I could prove it, but only that I believe it. In searching this unpathed field, where shame and fear have so long excluded all fair and open treatment, such as is accorded to other subjects, we have to be guided somewhat, at first, by the hints of consciousness. My impression is that in the exaltation of sexual fellowship all good persons are conscious of being drawn near to the divine source. A sense of sacredness and purity—a presence as of heaven-born, infinite joy supervenes on such occasions. What is this but the enwrapping *nimbus* of the Divine Being? That amativeness and veneration, or the sentiment of worship, are

nearly related, and naturally react on each other, is shown by the love-experience which often attends revivals of religion.

"The practical results of this view," continues this writer, "is to redeem sexual relations from the commonplace, or even the low and degrading associations which ignorance and the devil have sought to cast around them. That which symbolizes the union of the Eternal Bridegroom and Bride, and springs from it, is not rightly associated with shame; it is not an orgy, but a sacrament."

Without quoting or writing further upon this departure from the legitimate purpose of this essay, I will at once proceed to explain how, in my opinion, the sexual organs are employed to perpetuate the human family. It must have become fixed in the mind of the reader by this time, that the male organs called the testicles secrete the propagating fluid of the male, and that the healthy semen is alive with microscopic creatures called the spermatozoa; and further, that the ovaries of women produce eggs, called the ova. The latter, as they ripen, descend through the fallopian tubes into the cavity of the womb, the mouth of which ever stands ready to absorb any particles of the male fluids which may come in contact therewith. Entering the womb, what then?

Some ancient, and a few modern physiological writers have ventured the singular hypothesis that the spermatozoa of the male are perfectly formed miniature men and women, and that the egg of the female is only food for the one which takes lodgment therein! This is simply ridiculous, when it is considered that the spermatozoa have no organs for performing the functions of mastication and digestion. Early habits maintain a powerful influence on all animals, and if the little fellow once commenced eating, he would keep it up throughout the period of gestation; and everybody who is old enough to comprehend any thing about the matter, knows that the fœtus derives its nourishment, not from eating, but from what is furnished by the mother through the umbilical or navel cord. Not till after birth does it exercise its masticating and digestive functions, and then it keeps them up with a commendable perseverance until death! Nor would the little fellow give up using mouth and stomach during gestation if it once commenced by swallowing down the ovum. Eating is a bad habit to break one's self of, as everybody knows who is used to good dinners! Other theories, no less irrational have been promulgated, but I will not occupy space with their presenta-

Fig. 151.

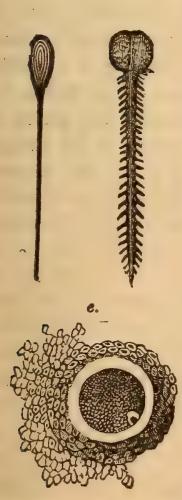
THE SEMEN of the male largely magnified, to show the spermatozoa therein.

tion; all the author can do is to theorize, for there is, thus far, apparently no way of arriving at positive knowledge in regard to the matter. We may, however, familiarize our minds with nature's laws, and by doing so, it seems to me that a pretty correct theory may be arrived at. I shall, at least, offer mine, and leave it to the good sense of the reader, if it is not well sustained by all that science, up to the present time, has revealed.

Before entering upon this branch of my subject, the reader will more readily see the plausibility of my views by looking at the illustrations, Fig. 152, wherein *a* represents a magnified spermatozoon, *b* the spinal cord with its nervous sprouts, and capped with the back of the brain, and *c* the ovum or egg of the female. Particular attention is called to the resemblance existing between the spermatozoon and the spinal cord. And then the reader is referred to Fig. 153, showing the brain, spinal cord, and its nervous branches, in the developed state, and let it be remembered that it is universally conceded that the spine is the great nervous trunk. The light spot exhibited in the ovum in Fig. 152, is regarded by anatomists as the germ.

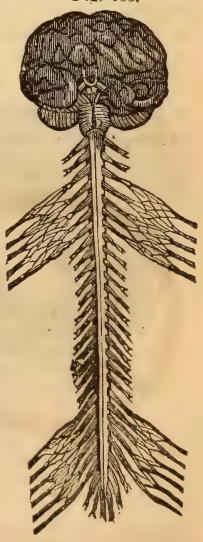
Now my theory is that the spermatozoon of the male is composed of the germ of the cerebellum and spinal cord; that the germ of the female egg is composed of the germs of the organs which are contained in what is commonly called the trunk, or body, and the arms and limbs issuing therefrom, wrapped in a thin membrane; that the spermatozoon enters this membrane and takes a proper position, from which it throws out its nervous sprouts around and through the organic germs supplied in the ovum; that the nervous ramifications thus expanded from the spinal cord impart nourishment and vitality to the organs contained in the female germ in their new condition, receiving their supply from the magnetism of the procreative organs of the mother; that as soon as the vascular system, or the system of veins and arteries, becomes sufficiently

Fig. 152.



SPERMATOZOON, SPINAL CORD, AND OVUM.

Fig. 153.



ANTERIOR VIEW OF BRAIN, AND SPINAL CORD WITH ITS NERVOUS BRANCHES.

developed, the placenta attaches itself to the walls of the womb and draws its supply of blood therefrom; that the advent of this fluid-flesh, fluid-muscle, and fluid-bone (for of such constituents is the blood composed), is seized upon for building up the framework of the osseous structure and the various layers of muscle, etc., which are carried atom by atom to their proper places, just as the particles of gold and silver are carried and deposited by galvanic currents in the electroplater's process. Fig. 154, representing an embryo of forty-five days, attached by the umbilical or navel cord to the placenta, presents an appearance quite corroborative of my theory.

People seldom realize, when they look upon a watch-case that has been galvanized, that the gold or silver with which it is so beautifully coated was carried particle by particle, and deposited thereon by currents of galvanism. Galvanic or voltaic currents of electricity, passed through minerals in solution, will often build up the most wonderful images of trees, coral, etc, on metal plates suspended therein. Then why may not the animal electrical currents build up the human structure in the womb under electrical laws established by the Divine Artificer?

Can the germs of these nervous sprouts from the spinal cord be detected in the spermatozoon by the microscope? No, they have not yet been. Neither have the roots, stalks, or heads of wheat been detected in the little kernels of grain the farmer plants. But that they nevertheless possess them is evidenced by the fact that they throw out roots, tall stalks, and in process of time, what is called the head, in which is arranged, in the most mathematical order, a great number of kernels of the grain. It has been found, too, that the application of electro-magnetism to the plant hastens its growth, showing that this is undoubtedly the great motive power nature supplies to the roots of plants to carry up, particle by particle, the atoms of nutrition they suck from the ground.

Fig. 154.

EMBRYO OF FORTY-FIVE DAYS.

Dissections of human bodies at various stages of development, from utero-life to advanced age, have revealed the following facts: that the nervous system is developed first; that the spinal cord undergoes great changes. The extremity of the spinal column in all human beings projects a little, such projection being called the os coccyx. In infancy this projection is a mere cartilage, but as the child advances in age, it grows more osseous, or bony, until it becomes bone. While thus changing, it forms into separate bones, called the vertebræ, and not until adult age do these unite in one solid bone.

Now, it seems to me that these various changes which the spinal cord and spinal column pass through, go to support my theory. The spermatozoon having, in embryo, the cerebellum and spinal column encased in a membrane, begins by permeating the portions of the human system furnished in embryo by the female egg with its sprouts or branches, and in due course of time the membrane encasing it becomes cartilage, and finally bone, and not until adult age does it cease in its changes. During these changes in the substance of the case, or column, the spinal cord recedes until it only reaches the first or second lumbar vertebræ. This last statement is a conceded fact.

I might suggest many facts substantiating my hypothesis, but I have already occupied more space than I can well spare for this branch of the subject. I have so presented it that I think the reflective mind will admit the rationality and plausibility of the theory.

Their Influence on the Social Position of Women.

"Might makes right," or rather might overpowers right in every community where the moral standard is not sufficiently elevated to make might the conservator of right. We have seen in the essay on the influence of the sexual organs on physical development, how the ovaries of woman eliminate from her the qualities we find in an athlete, and how the testicles of man secrete and prevent the wholesale waste of those qualities, by which physiological law woman is made less powerful than her brother—man. Could "angels of light, or ministers of darkness," have believed that man would have taken advantage of the fact to oppress and ever keep in a secondary position his less powerful companion? Yet such is the disgraceful spectacle presented in all history. Where we find even a partial exception, it is not due to the supposed humanizing influence of what is improperly called Christian civilization. In the traditions of the past, we read of a race of Amazons who maintained an ascendency over, and isolation from, men by their practice in arms. "They lived," says a writer, "near the river Thermadon (now Termah), in Cappadocia, just south of the Black Sea." "They never had any commerce with the opposite sex, except for the purpose of propagation, visiting the neighboring people for a few days at a time when necessary for this. The male children were given to their fathers, but the females were carefully educated with their mothers in warlike labors; their right breast was burned off that they might hurl the javelin more effectually." Brave women! I wish their spirits, clothed in their pagan bodies, and armed with the javelin, might descend to earth to-day and enfranchise their sex, who, after many centuries of pagan civilization before Christ, and nearly nineteen hundred years of Christian civilization, have yet to permanently attain the position of equality which they enjoyed among the barbarous

tribes of ancient Germany and Scandinavia, before Christian teachers ever penetrated their wild abodes. Look at the facts which history presents, my fellow-men, and blush for the honor, the magnanimity, the humanity of our sex.

Aristotle, the great Greek philosopher, said: "There are three classes of persons who cannot act for themselves; these are the slave, the child, and the woman. The slave has no will, that of the child is incomplete, and that of the woman powerless." But long before Aristotle's time, accepting the narratives of the Old Testament, behold how the rights of women were ignored! The patriarchs of old treated woman with less consideration than they did their herds. Among the early oriental tribes, and in many of the nations of Asia to-day, she was and is sold like a cow or an ass; not by some supernatural being, but by *man*. She descended with the estate of man to his nearest relative, and was in all essential respects the property of man. In the early history of Rome and Greece she was treated as a child; man was her sovereign. In the later periods of the Roman republic, when she was allowed to participate in a measure in legislation, when, in brief, she was attaining equality with man, the latter, jealous of his declining supremacy, tamely submitted to the ambition of Augustus, and allowed him to change the republic to an empire, doubtless, among the knowing ones, with the view of once more grappling woman, and replacing her under his tyrannical control. At least one of the first developments of his "policy" was to make regulations curtailing the rights and privileges of woman. As if to "add insult to injury," men said then, and our sex publish it occasionally to-day, that the debauchery of women caused the fall of the republic. Probably some, may be a great many, of the women were publicly and notoriously "bad." If so, what must the men have been? There are certain vices and excesses which women cannot practise without the *equal* participation of men; but supposing woman had not yet learned to make good use of freedom and partial equality, we nevertheless find that her temporary elevation produced the most noteworthy crop of great men of any country or age.

"In the *beginning* of the empire," says Ricord, "Rome was at its height and splendor; its dominion had been extended over all the nations of Europe, excepting some powerful northern tribes that still maintained their independence. Within the limits of its empire were England, France, Spain, and all the states of Italy, Greece, the country now occupied by Turkey in Europe, and many other nations; its sway extended over Syria, Asia Minor, Palestine, Arabia, Parthia, and the northern part of Africa; over Morocco on the west, and to Ethiopia on the east. Throughout all this country the people of Rome had extended the arts of painting, sculpture, and architecture, so that a multitude of cities in various parts of Europe,

Asia, and Africa, were filled with costly temples, palaces of marble, beautiful statues, and valuable paintings; but Rome itself, was, of all cities in the world, the most wonderful. It was fifty miles in circumference, and contained four millions of inhabitants. * * * In polite learning the Romans made proficiency, which has never been excelled. Besides Virgil, Horace, and Ovid, poets whose names are familiar to every one, Livy, the historian, graced this period. *In short, the glories of this age reflect a lustre on Human Nature itself.*"

Now, this remarkable prosperity, this unexampled proficiency in knowledge and art, were the products of the republic; these great men were conceived and cradled by the women who lived just previous to, or at the time of the fall of the republic. Ovid was born in the very year which witnessed the fall of the Roman consuls. Cicero perished in the same year, and to the gradual elevation of woman during the last century or two of the republic, alone can be attributed that development of the human mind which led to the glory of Rome; for was it not in the wombs of her matrons, under the inspiring influence of female culture and liberty, that these great men were conceived, and the elements of their greatness formed? Although not allowed equal opportunities with the men of those times, women never before nor since enjoyed so much political liberty and personal freedom, and to this freedom is attributed by some writers the decline of the republic! What evidence is there of it? Men are willing to grasp this weapon and flourish it in the faces of those who advocate the enfranchisement of women.

I imagine that I can see the more probable reasons for the fall of the Roman republic, and the rise of the empire. One of them has been already incidentally stated; another may be given, as the ambition, the shrewdness, and powerful influence of the Cæsars; but there is another which may possibly be mightier than all the rest. It is this: Rome was an attractive republic, just as ours is to-day. You see what Ricord says of her, and what historians generally say of that great nation. Her greatness, her prosperity, her comparative freedom, attracted not only other peoples, but other nations to her. Those who did not fall into her lap voluntarily, were one by one brought in forcibly; for Rome was aggressive—ruinously so. These peoples—these nations had not been schooled as the early Romans had been in the political wisdom necessary to maintain such a republic; they were indeed like young profligates who inherit wealth instead of making it; they do not know how to preserve it as those who gather experience with their material accumulations; and when Rome became so sick with an overloaded stomach, with diverse opinions, incongruous political elements, vices, and personal ambition, that it could no longer survive, it perished just as our republic will, if it does not possess a sufficiently power-

ful political stomach to digest the influx of foreign and heterogeneous elements which are entering it, not only from the civilized nations of Europe, but from those which have for ages isolated themselves from the rest of mankind in China and Japan. As a physician, accustomed to the study of constitutional peculiarities and diseases, I have a good deal of faith in our national strength, and think she will survive the engorgement, if she only takes that which voluntarily falls into her mouth, without glutton-like reaching for all the outlying nations and islands which present exterior attractions! But if she does, and then falls, it certainly cannot be laid to the possession of too great liberty by American women, unless a radical change comes over the sentiments and customs of the people. But more about American women by and by. For the present we will look farther back.

In the patriarchal days of Rome, woman was regarded as morally and physically inferior to man. This sentiment was in striking contrast to that of the northern barbarians, who regarded her as simply physically inferior to her masculine companion; and as one traces back the origin of the customs and sentiments of to-day, he will be surprised to find that what share of liberty the women of Europe and America now enjoy, is mainly a legacy from the rude people of northern Europe. True, the Romans became infected with the "heresy" of woman's rights at an early day, and gradually—very slowly—improved the condition of the sex. Then, as before related, women grew more intelligent, more influential, and Rome grew mightier. How, indeed, could it be otherwise? Were not the women the mothers of her sons? The first symptom of jealousy of the rising power of woman, if I mistake not, appeared in the family of the Catos, who were disposed to abridge her pecuniary independence. This small cloud which arose in the republic grew into a storm of sufficient magnitude at the beginning of the empire, to overwhelm woman in the reign of Augustus. This reaction was nearly at its height under Tiberius, considering which, it is not strange that the apostles were infected with the prevailing anti-woman's rights mania. Saint Paul, according to his own admissions, occasionally gave forth a sentiment "on his own hook;" the following must be one of them:—"Let your women keep silence in churches; for it is not permitted unto them to speak; but they are commanded to be under obedience, as also saith the law. And if they will learn any thing, let them ask their husbands at home; for it is a shame for a woman to speak in the church."

Now, if old Saint Paul was a good Methodist, or a superintendent in any Sunday school in the present century, he would be mortally ashamed of the above. Indeed, all that was written derogatory to the true position of woman by the apostles may be directly traced to the popular and all pervading sentiment of the times in which they lived. Nor did these prejudices die with them. Tertullian, one of the distinguished Latin fathers, born

after Christ one hundred and sixty years, after his conversion and ordination as a presbyter, said to women: "You ought always to be clothed in mourning and in rags, presenting to the eyes only a penitent, bathed in tears, thus atoning the crime of having lost human kind. Woman, thou art the daughter of the devil. It is you who have corrupted the one whom Satan dared not attack face to face; it is on your account that Jesus Christ is dead."

The Church of the fourth century decided that woman should be subordinate to man, and that man only was created in the image of God. The canonic law excluded her from all but strictly domestic avocations. She could not even appear as a witness; her word could not be accepted under oath. Thus woman was debased even by the church, until she became almost a slave. Gradually, as Roman civilization became mixed with northern barbarism, after the disintegration of the empire, the sentiments of civilized Europe in regard to woman slowly changed. The adoration which the intelligent Germans and Scandinavians exhibited for the physically weaker sex entered little by little into the social life which overspread the continent and tempered the prejudices of the people and the church. We are far from being up to the old Germanic standard as yet in Europe or America, but let us hope that we are moving steadily toward it. If we will but add the spirit—not the arbitrary letter—of Christianity to the old barbaric sentiment, woman will emerge from her thraldom, and will stand morally, socially, and politically equal with man; for no *birth mark*, be it variation in bodily confirmation, or in color of skin, can justly fix a limit to the development and social freedom of any member of the human family. All such distinctions are arbitrary and self-evidently unjust; they cannot exist in a true republic; they die with kings. If woman is morally equal to man, it is simply upon the savage rule that "might makes right," that she occupies a subordinate position to him. I will not occupy time and space here with the presentation of woman's wrongs. Some of them will find place in other portions of this volume. It seems hardly necessary to allude to them at all, as they are presented in the every-day drama and tragedy of life. Those of my sex who are so blinded by selfishness, and of the opposite sex who are so contented with empty flattery that they cannot see them, must slumber on for the present, unconscious of the fact that one of the prime causes of crime and human misery is attributable to imperfect propagation, and that we can never hope for strong-minded sons, until the world is filled with strong-minded mothers. No reasonable mind will question that if a certain degree of progress is made when only one-half of a people are permitted to develop themselves mentally and physically up to their highest possible culture, just twice that progress may be made when the other half is allowed equal advantages. It is a popular delusion

that American women have as many, if not the same privileges as men. The conservative man exclaims, "We worship them as angels;" and thoughtless women of affluence, and less favored women in humbler positions, bidding for masculine applause, respond, "We have all the rights we want." Gallantry is mistaken for justice, and soft soap for equity. Even these exist only on the surface. They compose the cream that rises to the top of polite society, and this is fed only to the handsome, rich, and otherwise fortunate; all below is skim milk, and this is dealt out sparingly and grudgingly to toiling women, unhappy wives, and to all, indeed, who most need sympathy and help. But let no man who suddenly awakens to this injustice, suppose in his arrogance that he can *give* woman her rights. The very fact that men talk of *allowing* women this or that liberty is evidence in itself that authority has been usurped. As well might a pickpocket talk of giving a porte-monnaie to somebody from whom he had clandestinely filched it. I tell you, reader, we men have no rights to *give* woman; she possesses naturally the same rights that we do. If she does not enjoy them, some one is a robber. Who is the thief? Let him make restitution with the full understanding that he is entitled to neither reward nor thanks. With all her physical disabilities, as compared with man, woman can accomplish more for herself and her sex in this competitive world *without* his sympathy and *with* her freedom, than she can without her freedom and with his sympathy and support. But whether she can or not is none of our masculine business, nor have we any right to stand in the path of her progress, to discuss the possible effect upon society, if she be allowed to pass. Here again might is interposed to trammel right. There can be no question of expediency where one of justice is involved. The establishment of impartial rules of justice can never overthrow a social system that is grounded in truth, nor imperil the permanency of a true republic. Let it be impressed upon the minds of the rising generation that man holds his superior position wholly in consequence of his greater physical strength; that the same brute force which made her a salable commodity in the early history of the world, makes her the plaything and foot-ball of man to-day; and if our children in the light of the nineteenth century have any justice, any filial love, or, both being absent, any sense of shame, the time draws nigh when the world-wide oppression of woman will exist only as a disgraceful blot on the pages of human history.

Their Influence on Civilization.

The origin of man is one of the great questions which agitates the scientific mind, and, while avoiding its discussion in these pages, it is necessary for a starting-point, that I state two or three of the prominent prevailing opinions. The popular conviction among the church people of Christendom

is, that the race sprang from one pair—Adam and Eve. Among the philosophers, there are divers opinions—some accepting the Bible history, others holding that there must have been, originally, various tribes of men created at the outset, just as there were varieties of lower animals, vegetables, fruits, and flowers, each adapted to the latitudes in which, since the beginning of the historical period, they were found; others believing that the human being was the product of gradual development from animal life beneath him. Whichever opinion is entertained, I believe that it is conceded by all that there is no very connected or consecutive history of the human family as a whole from the time of his creation, down, at least, to the days of Moses. At the very outset of Bible history, we find Cain taking to himself a woman of whom no previous account was given.

The first traditions that historians gathered up presented a variety of tribes living without law or morals. According to the testimony of Herodotus, five hundred years before Christ, and Diodorus and Solinus, the first century before Christ, as given us by Paul Gide, "among the wandering tribes of Africa marriage was unknown. Men and women lived together like beasts of the field. When a child reached maturity the people caused him to be delivered to the man whose disposition most resembled his, as this resemblance was thought to be sufficient evidence that he was the child's father. These savage customs of the tribes of Africa were also found on the shores of the Euxine (Black) Sea, and on the great plateau of Scythia. Here women and children, according to Strabo, were held in common. Xenophon and other writers, flourishing between two and three hundred years before Christ, speaking of other people of Asia, present them as holding to the same customs." *

"In ancient Europe," continues Paul Gide, substantially, "traces of this barbarity seemed to have been rapidly effaced. At the time of the classic writers we find them in only a few remote regions at the foot of the Caucasus mountains, on the shores of the Euxine (Black) Sea, on the coast of Dalmatia (east of the Adriatic Sea in southern Europe), and in some of the remote islands, as the Balearic islands (now Majorca and Minorca), Brittany, and Ireland. But in the more civilized nations, Greece and Italy have preserved in their traditions the memory of a state of promiscuity which might have preceded the institution of marriage. At Athens, according to Clearcus, writing the fourth century before Christ, the relations between the sexes had been without rule and without law; prior to the invention of marriage by Cecrops, no child could recognize his natural father. The historian, The-

* It should not be inferred by the reader that the periods in which these historians wrote, were cotemporaneous with those in which the historical facts presented by them occurred. As will be seen by and by, we have the history of marriage for over five thousand years. What they presented were the early traditions which they were able to gather up in the times in which they lived.

opompus, three hundred and fifty years before Christ, speaks in about the same terms of the early inhabitants of Italy: 'Among the Tyrrheni,' says this writer, 'the custom willed that all women should be common; all children were also trained in common, for no one could tell of which child he was the father.' Testimony to this effect is abundant, and what is most remarkable, it is unanimous." "All writers agree," continues Gide, "that marriage did not exist at the earliest stages of human society, but has been the work of civilization, and its first great gift." The closing part of Mons. Gide's statement may meet with some dissenters, unless Christianity and civilization make the institution more perfect than it now is.

It appears from the foregoing that the human family, like the birds and the beasts, at the beginning of creation, held all things in common; exactly when some smart people first took it into their heads to fence off the portion of the planet they inhabited, history does not tell. But the moment it was done, and this patch of ground was understood to belong to Joshua, that to Jeremiah, and the other to Ezekiel, it became necessary to institute regulations governing the intercourse of the sexes; otherwise, man would occupy a more advantageous position than woman. He could plant the germ of a new being with as little care as he would drop a kernel of corn in the mellow earth for germination; but for weary months she must carry about in her body this growing, living freight—must lie down in the fullness of time and give forth the fruit of her womb, and then for many months thereafter nurse and take care of the helpless product. Here, then, we first begin to see the influence of the sexual organs making itself felt in the invention and development of civilization.

From the best sources of information attainable, it seems reasonable to infer that no ideas of the rights of women, further than those relating to her support, entered into the undeveloped heads of the early fathers of the race, for the first constituents of family organization—if we except those in the case of Adam and Eve—revealed by tradition or history, were found to present one man and just as many women as he could maintain. He counted them by the hundreds, as he did his flocks and herds. This monopoly of the women by the opulent caused so great a scarcity, that the female sex became a merchantable commodity—part of an estate. Hence polygamy among the successful tribes resulted in compulsatory monogamy (the union of one woman to one man) among those who were less so. As these family associations became more thoroughly organized, and as the expenses of living increased, they were inevitably confronted finally by men who could not support one woman. Hence there arose at that early period two customs of which ancient history gives an account, namely, polyandry and prostitution. The former consisted of one woman and several husbands, and attained no very permanent foothold, although there are

relics of this sort of family organization still existing, as will be seen in a subsequent chapter. The latter was inaugurated by the advent in every community, where customs or laws protected the family association, of a class of women who would gratify the amative appetites of men for a pecuniary consideration. No doubt, originally, the women adopting this profession were mainly the homely or ugly ones, who were not available in the matrimonial market at any price. In the lapse of ages, however, prostitution has incomparably outgrown polyandry, having increased so steadily that wherever the laws of civilization maintain with the greatest rigidity the institutions of marriage, prostitution is found side by side with it. Not only so, but in early times prostitution was openly encouraged by the heads of families as necessary for the protection of the chastity of their own women. In Rome, under Augustus, the laws did not punish prostitution, but visited death upon the adulterers; they also held out rewards to the fathers of large families, and this combination of circumstances actually led ambitious husbands who were physically incompetent of becoming fathers to cause their wives to become public prostitutes, in order that numerous progeny might be obtained, and therewith the promised political favor and reward. In ancient Greece, in the days of Socrates, courtesans "were the honored companions of their statesmen and philosophers." "That distinguished philosopher," says a writer, "not only visited them himself, but took his wife and daughters, that they also might have the advantage of their superior elegance and refinement; for these courtesans, who were foreigners, were rich, educated, and highly accomplished, and in these respects superior to the secluded and uncultured wives of Greece. They occupied the same social position in ancient society, that is now occupied by our distinguished female poets, novelists, actresses, singers, and artists."

Lady Augusta Hamilton, who wrote in the beginning of the present century, spoke of public-houses in the Netherlands which were licensed by the state for the reception of girls of the town. To these places, remarked this writer, "people of character resorted openly without fear or shame; there was as little scandal in being seen in one of them as being seen at a play-house or any other place of amusement. The entertainments at these places were music and dancing; those not engaged in dancing were seated around the room with their paramours. Any one choosing to retire with one of them, there were small rooms adjoining, furnished with a bed and other conveniences. Their entrance to and exit from these rooms attracted no more attention than if they had stepped out to speak with a friend. It was the opinion that if they did not indulge the people in this particular, they should never be able to keep their wives chaste, and therefore of two evils they chose the least."

In Japan, to-day, as will be seen further on, public women, or courtesans, may contract honorable marriage or return to the family hearth. Society does not point the finger of shame at them, and I make bold to say that if, as some contend, "prostitution is a *necessary* evil," this treatment of this unfortunate class is just as it should be. If our civil institutions cannot be so amended as to overcome the evil, or to put the proposition as it practically presents itself—if prostitution is an inevitable companion of our civilization—why, then, it is enough that the doomed women who must fill this social chasm be physically cursed, without being morally and socially condemned. For reasons presented in the essay on Prostitution in Part I., it is hardly possible that they can avoid becoming the victims of disease. Must they, in addition to all this physical misery, be social outcasts—candidates for physical, social, and moral damnation—coupled with the certainty of election by the action and voice of both sexes and the decree of a merciful Providence? All this, too, with the preservation of the personal respectability and possible sanctification of the souls of the men who have reduced them to this condition, and retain them in it? Poor women! Until mankind learns how to redeem you, the tears of sainted mothers will so whiten your stains that our gracious Father will not put his finger upon them.

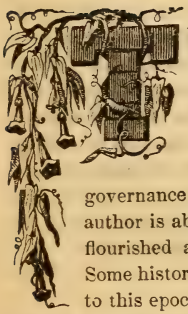
In our civilization we have a heterogeneous mixture of the elements of past social organizations. We practically adopt the old Scandinavian idea that woman is physically the inferior of man—the old patriarchal Roman sentiment that she is morally inferior, for we attribute all her short comings, physical or moral, to the alleged fact that she is the "weaker vessel." In law governing our family relations, descent of property, etc., we partly adopt the old Scandinavian rule; in the complexity of all law, and our adhesion to it without too fine regard for equity, the peculiarities of the Roman empire under Augustus and Tiberius; in our sexual practices, privately—not publicly—the Greeks at the time of Socrates; in our prodigality and display, the Romans of the "Augustan" age; in our personal adornments, the rings and furbelows of the pagan world; in our religion, a mixture of the morals of the Mosaic dispensation, the word rather than the spirit of the Christian dispensation, and the idolatry of the worshippers of the *golden* calf. In our marriage customs we have the monogamy of the ancient Romans, the polygamy of the old Israelites, the omnigamy of the second century; and in our prostitution, practically the polyandry of some of the ancient communities of Africa. In our languages, with one common Latin root, we have as many branches and bendings as ever graced a water willow. Then we have gathered up all the bad habits of early oriental and European life, and added to them the chewing and smoking practices of the aborigines of America. While it may not appear

on investigation that we have, in forming our civilization, gathered only the dregs of the past, it is certain we have not taken the cream. We have not fallen further short of the vices of oriental nations than we have of the virtues of the ancient Germans.

In conclusion, allow me to remind the reader, that to fully observe the influence of the sexual organs on civilization, it is necessary to peruse the second essay in this chapter, and the one immediately preceding this. In the light of the three essays we see that they gave to man physical power over woman—that these powers were used to make woman hardly more than a slave in the early ages, and a "second fiddle" to man in nearly all ages and countries. When at any period she seemed likely to take an equal place with man, a reaction came in the masculine mind that remanded her to a secondary position. His advantage in physical strength has made him her master in the organization and continuation of unequal marriage regulations; in the formation of every plank in our social system; in the construction and working of our political machinery. And in this injustice is undoubtedly the concealed wormwood that embitters social life so extensively wherever our so-called Christian civilization prevails.

CHAPTER III.

HISTORY OF MARRIAGE.



THE customs governing the intercourse of the sexes previous to the establishment of any arbitrary rules, are given in the last essay of the preceding chapter. We now come to the first attainable historical accounts of social or legal regulations appertaining thereto. The first man to inaugurate any civil code for the governance of man and woman in their sexual relations that the author is able to trace out was Menes, the first king of Egypt, who flourished about three thousand five hundred years before Christ. Some historians say three thousand eight hundred years. Previous to this epoch we have no account of marriage whatever, excepting that given in the Old Testament, at which period men *took* to themselves wives and concubines, according to their individual proclivities, without legal restraint. The next lawgiver we encounter is Fu-hi, who invented a marriage system for the Chinese, two thousand six hundred and fifty years before Christ. Next we find Moses, the leader and legislator of the Israelites, about the sixteenth century before Christ, laying down a variety of rules for the regulation of intercourse between man and woman. Cecrops, 1550 B. C., concocted a code for the Greeks; and the Romans at the very outset of their birth into the family of nations, are said to have had some stringent social—not legal—regulations for the governance of the sexes. Most of the northern nations of Europe were also discovered at the period of the Roman conquests to have rules as inviolable as law in the construction and maintenance of the family. In the new world we cannot go far back in this investigation; but we find that the early Peruvians attributed the origin of their marriage system to Manco Capac, in the twelfth century after Christ; and the Spanish invasion of Mexico, in the beginning of the sixteenth century, revealed the existence of a marriage institution sustained by law in the then most powerful empire in America.

In this chapter, I shall endeavor to give as brief and connected a history as possible of the rise and progress of the principal marriage systems which started with the dawn of civilization, and which have been handed down to us through successive ages. In collecting the facts upon which the essays

given in this chapter and those contained in the one which follows on the marriage customs of to-day are based, I beg leave to say that neither time, patience, nor expense have been spared to make the historical matter complete, and though it is not as much so as I could wish, owing to the scarcity of reliable works giving information on the subject, it is probably more succinct, comprehensive, and connected than can be found in any volume printed in the English language at the present writing. Possibly some inaccuracies may occur, for most of this volume has been written in the intervals of fatiguing professional labors. I am greatly indebted to the industry of my wife for translating from the dry legal pages of a new and able French work, some of the most valuable facts herein presented. This work is entitled "Study upon the Private Condition of Woman in Ancient and Modern Law," etc., by Paul Gide, and was undoubtedly written for the legal profession. The work having received the approval of the French Academy of Science, it may be regarded as reliable authority. I am under great obligations to a clergyman of this city, for having called my attention to this work, and for the use of probably the only copy in this country at this time; also to the same gentleman for commending to my perusal a work entitled the "History of European Morals, from Augustus to Charlemagne," by William Edward Hartpole Lecky, M. A.

Many facts have been obtained from the American Bureau of Literary Reference, Mr. Frank H. Norton, formerly connected with one of our large city libraries, having been employed by that useful institution to collect them especially for these pages. Many more have been excavated from standard works, musty old books, magazines, and newspapers, by the author, who has endeavored to arrange all these detached fragmentary facts into a connected and entertaining history. With the foregoing introductory and explanatory words, the reader's attention will first be invited to the

History of Polygamy.

In writing any history of marriage whatever, it is difficult to avoid the controversy going on between the theologists and scientists as to the origin of man, the unity of the races, etc., and yet be thorough in its presentation. But the author pleads lack of ability, preparation, time, and space to enter into this limitless arena of debate. Whether or not the reader accepts the belief entertained by so many in Christendom of the descent of the whole human family from one pair, traditions both sacred and profane point to polygamy as the oldest form of marriage. If Adam had but one wife, "circumstances over which he had no control" (!) might have prevented him from having more, for we do not descend far in the history of his family before we find Lamech with two. Then, in Noah's time, we find, according to Genesis [Chapter 6], that "the sons of God saw the daughters

of men, that they were fair, and they took them wives of all which they chose." These matrimonial arrangements, too, it seems, gave birth to children which became giants, as we read a little further on. Following the old Scriptural story, the world became so wicked, a deluge came, which destroyed all but the family of Noah; then came another forced period of monogamy among this people, the exact length of which cannot be ascertained from the account given in Genesis, which simply speaks of the descending heads of families down to the time of Abraham, the father of the Hebrews, who, we find, without question, was a polygamist; nor is there any doubt that those who preceded him were, for at that period of the world's history women had no rights which men, white or black, felt bound to respect.

Fig. 155.

THE POLYGAMIC FAMILY.

Reaching Abraham, we come to a period only about two thousand years before Christ, and we must therefore go back a few centuries, for Egyptian civilization dates back considerably farther than this era. Menes is said to have been the founder of marriage among the Egyptians three thousand five hundred years before Christ. I have found it a little difficult to obtain any positive information as to the character of this early Egyptian marriage system, but feel justified in placing it in the history of polygamy, because, if a plurality of wives was not allowed, concubinage unquestionably was, and this, of course, is practically polygamy. The fact that early historians speak of the *wife* of an Egyptian king, indicates the existence of ostensible monogamy. That those kings at least were allowed concubines, would inferentially appear, from several facts which might be quoted if necessary, but perhaps it is sufficient to state, that Mr. Samuel Birch, the distinguished hierologist, speaks of one of the early Pharaohs as having married an Asiatic princess, giving her the title of "Ra-neferu, the king's *chief* wife." Then, again, we may judge something of the habits of the Egyptians at a later

date, say fifteen hundred years after Menes, from the Scriptural account of Abraham, going down to Egypt to avoid famine, filled with terror, lest he should be killed by them, on account of the personal attractions of his wife Sarai. To avoid this peril he passed her off for his sister. So soon as they entered Egypt, sure enough, Pharaoh's eyes fell upon Sarai, and she was at once installed as a member of his household. But it so happened that every thing went wrong with the king, from the moment he kidnapped this Hebrew woman, and when, on investigation, he found she was the wife of Abraham, and having been plagued sufficiently on her account, he seemed glad enough to restore her to her husband, and get rid of the whole family without further molesting them.

There is reason to believe that concubinage gradually grew unpopular in Egyptian civilization; for, at the time Alexander the Great penetrated Egypt with his conquering army, about three hundred and thirty years before Christ, it is said of concubinage, "though it may have been lawful, it was not common," and, though the "kings sometimes indulged in it, polygamy was at that time expressly forbidden." "According to Alexander, 'his system of marriage presupposes women to be slaves." (Query: Was Alexander the first woman's rights man?) "Harems," remarks Mr. Norton, "which always formed a portion of the Persian and Turkish household, were unknown in Egypt; nor were the females secluded from *public observation, as in other oriental countries.*" All this last quoted matter, however, relates to Egypt at a comparatively recent period. We have passed the history of neighboring people with old Fu-hi, the originator of Chinese civilization and marriage, and the story of Hebrew polygamy in early times.

We read that Fu-hi established civilization among the Chinese, and founded a system of marriage two thousand six hundred and fifty years before Christ. It seems to me, in the light of all the Chinese history we possess, and the well-known marriage customs of China to day, there can be no reasonable doubt that the marriage system instituted by Fu-hi was polygamous, at least practically so. From the earliest information we obtain in regard to the customs of the Chinese, we find that while the law allowed them but one wife, they could have as many concubines as they chose. Having, in a few words, disposed of Fu-hi, who lived before Abraham, we will now return to the "Father of the Hebrews," about two thousand years before Christ. The Bible account in the beginning of Genesis [Chap. 16] is as follows: "Now Sarai, Abraham's wife, bare him no children; and she had a handmaid, an Egyptian, whose name was Hagar. And Sarai said unto Abraham, Behold now, the Lord hath restrained me from bearing; I pray thee, go in unto my maid: it may be that I may obtain children by her. And Abraham hearkened unto the voice

of Sarai * * * and he went in unto Hagar, and she conceived." After a while, we find that Abraham marries another, according to chapter 25th of Genesis: "Then, again, Abraham took a wife, and her name was Keturah," by whom he had six sons. We find, too, that Abraham's posterity on the masculine side rather enlarged than restricted the plurality system. We perceive also that these family arrangements sometimes gave rise to feelings of envy and jealousy among the wives. We read that "Reuben went, in the days of the wheat harvest, and found mandrakes in the field, and brought them unto his mother, Leah. Then Rachel said unto Leah, Give me, I pray thee, of thy son's mandrakes. And she said unto her, Is it a small matter that thou hast taken away my husband, and wouldst thou take away my son's mandrakes also? And Rachel said, Therefore shall he lie with thee to night for thy son's mandrakes. And Jacob came out of the field in the evening, and Leah went out to meet him, and said, Thou must come in unto me; for surely I have hired thee with my son's mandrakes," etc.

During the period between the times of Abraham and Moses, the marriage customs of the Hebrews were not materially altered, and according to Nichols, in his book on marriage, "the description of patriarchal life in the book of Genesis would apply with little alteration to the customs of most oriental countries." The second Hebrew patriarch was Isaac, and his son Jacob had a favorite son named Joseph, who was sold in Egypt by envious brothers. But, from the position of slave, Joseph was raised to be the prime minister to one of the Pharaohs, who allowed him to bring all his father's family, numbering seventy males, and probably ever so many females, into the land of Goshen, where they multiplied so rapidly, that the land was filled with them—according to Scriptural account—which seems likely under the then prevailing system of polygamy and concubinage. At the death of Joseph, the Egyptians commenced a series of oppressions of the Israelites, for by this name were the children of Jacob called. A new king, too, arose over Egypt, who knew not Joseph, and consequently felt unfriendly to his people, and jealous of their increasing number and power. After trying various ways to limit their increase, with no other result than a more rapid multiplication of them, the same as we find it in our day, in our treatment of the Mormons, this king ordered the midwives to slay all the sons born to the women of Israel; but this proved ineffectual, for, according to the complaints of the midwives, the Hebrew women were too healthy and too smart for them, so that an opportunity was not offered the midwives to smother the Hebrew sons. Finally the king, about one thousand six hundred years before Christ, charged all his people, that every son that was born should be cast into the river. About this time, Moses, who was to become the future lawgiver of the Israelites, was born, and

his mother, after hiding him for three months, made a little boat of bulrushes, slime, and pitch, and laid him in it among the flags, by the river. Here his sister watched him afar off, and one of Pharaoh's daughters happening to visit the river side, espied the little fellow, and, taking compassion on him, carefully removed him from his perilous position. The anxious sister, unable to control her solicitude, made her appearance and asked to know if she might not obtain a Hebrew woman to nurse it. The daughter of Pharaoh, much to her gratification, responded favorably to the singular proposition, and providentially Moses' own mother was employed, and paid wages by the daughter of the king. The further history of Moses may be read in the Old Testament, by those who are interested. I have quoted so much to show how indebted Moses was to woman, under God, for his preservation. First, the untiring efforts of his mother; then, the watchfulness of his sister; and, finally, the compassion and motherly care bestowed on him by the daughter of the king. Surely Moses, under these circumstances, would be just to women, when he should become a ruler in Israel! But was he?

According to Numbers [Chap. 30], a woman had no power to obligate herself by oath, by vow, or otherwise; her husband or her father must in all cases act for her. In brief, he says, "every vow, and every binding oath to afflict the soul, her husband may establish it, or her husband may make it void." According to the Mosaic law, a man could repudiate his wife for the slightest cause. The wife constituted a part of the estate, and reverted to heirs the same as property. Moses looked upon woman as only an instrument of procreation. Under his laws, polygamy prevailed to a greater extent than in all oriental Asia. In his expedition against the Midianites, an immense number of prisoners were taken, and he directed that every male among the little ones, and that every woman who had known man by lying with him, should be killed, while those female children which had not known man should be kept alive, and be divided among the people, the army, the priests, etc.; and it seems that there were thirty-two thousand women who had not known man. From a Christian standpoint all this looks like shocking cruelty and injustice, and so indeed it was; but in justice to Moses, it may be said, that some of his laws were more favorable to women, and it may be that at that age of the world he was kinder to the abused sex than any other ruler. We find, for instance, in Exodus [Chap. 21], that, "if a man sell his daughter to be a maid servant, she shall not go out as the men servants do. If she please not her master, who hath betrothed her to himself, then shall he let her be redeemed: to sell her unto a strange nation he shall have no power, seeing that he hath dealt deceitfully with her. And if he hath betrothed her unto his son, he shall deal with her after the manner of daughters. If he take him

another wife, her food, her raiment, and her duty of marriage shall he not diminish. And if he do not these three unto her, then shall she go out free without money."

The number of wives was not limited by Moses, but the rulings of the rabbis subsequently fixed it at four, after the example of the patriarch Jacob. He forbade the kings to have many wives, which injunction was disregarded by nearly all of them. He forbade the Israelites to marry aliens; and this law was violated by Moses himself, who espoused an Arab.

Some four or five hundred years after Moses, we find that King David, "the man after God's own heart," disobeyed the Mosaic law in various ways, and besides having concubines, he committed adultery with Bathsheba, the wife of Uriah, the Hittite, and, causing her husband to be slain, married her, and this woman became the mother of Solomon. He shut up ten of his concubines until the day of their death, because of their infidelity with his son Absalom.

Solomon flourished about one thousand years before Christ. We find that he loved many strange women, together with the daughters of Pharaoh; women of the Moabites, Ammonites, Edomites, Sidonians, Hittites, and of other nations. He married an Egyptian princess, and it is further related of him, that he had seven hundred wives and three hundred concubines. It was probably his excessive matrimonial experience which led him to say in Ecclesiastes [Chap. 7]—"I find more bitter than death the woman, whose heart is snares and nets, and her hands as bands. Whoso pleaseth God shall escape from her, but the sinner shall be taken by her. * * * Which yet my soul seeketh, but I find not: one man among a thousand have I found; but a woman among all those have I not found."

Solomon was certainly in a very peculiar situation, surrounded by one thousand women! Artemus Ward, when shut in a room with only seventeen widows of a departed saint at Utah, was excessively frightened, and begged to know if their intentions were honorable.

In subsequent times there were various modifications of Mosaic law among the indwellers of Palestine. Samai, according to Gide, "had held that one could repudiate his wife only for adultery," but this rule was disregarded. When the people of Judea became subject to Roman law, a woman was allowed a dowry, and a wife without a dowry was considered only a concubine.

According to Norton, wives and concubines of foreign origin were after a time "excluded from the large cities, as Jerusalem, and were driven to live in booths and tents on the high roads, where they plied the trade of the prostitute. At length they gathered around them male companions, and to offer inducements to the traveler, they instituted rites and ceremonies of the most disgusting character to Moloch, Baal, and Belphegor, who, rep-

resented by lewd images, were worshipped with forms which clearly indicated the existence among them of the worship of Priapus."

"Polygamy," remarks Gide, "was more largely permitted in Judea than in all Eastern Asia; not only was a man permitted to have many lawful wives, but also concubines; and to divorce one he had only to address her a letter of divorcement." Even after the Jews became subject to the Romans, polygamy among them to a considerable extent continued. Herod the Great, if I remember rightly, is said to have had seven wives. Those who had fled to Europe after their dispersion by Titus, A. D. 70, held tenaciously to their customs, including polygamy, as long as they could. According to Maimonides, a distinguished rabbi, the Jews of Europe had a plurality of wives as late as the thirteenth century.

Again we will return to an age fifteen hundred and fifty years before Christ, and follow Cecrops out of Egypt to Athens, where the civilization and marriage of ancient Greece first took root. The system introduced by him was unquestionably a second step toward a national recognition of monogamy, the Egyptians having made the first. It was more monogamic than the marriage of Egypt at that time, and yet a man was allowed one legal wife and one concubine, so that it cannot be placed under the head of "History of Monogamy," though many writers, nearly all, in fact, treat of it as a system of monogamy. It might perhaps be classified as a connecting link between polygamy and monogamy. But really such were the practices of the ancient Greeks, it is difficult to determine under which head in this chapter their marriage system should properly find place. It almost requires a separate one. When Athens was founded, women in that part of the world were undoubtedly scarce. They were monopolized by those who could afford to carry out the practice of polygamy on a large scale. Whether this scarcity, or some advanced ideas entertained by Cecrops, influenced him, he made it a rule, that a man should have but one lawful wife, whose children should be regarded as legitimate,—such was the marriage system first inaugurated at Athens. Concubinage being permitted to such as could afford it, or, in other words, a man having been allowed a plurality of women, if not of wives, was it not, indeed, practically polygamy?

After the lapse of several centuries, however, we find a new feature in Greek civilization. Concubinage died out; the wife was kept at home for raising children and attending strictly to household affairs, while foreign women, taking the part of courtesans, assumed great liberty and received extraordinary attention. Speaking of them, Paul Gide says: "There was however, a class of women, who, free from all domestic restraint, could mingle with the men, share their labors and their pleasures. They were the courtesans. The ancients presented them to us, as applying themselves with earnestness to the loftiest studies, and equaling men by the strength of

their mind, as well as the extent of their knowledge. Their society offered to the Greeks those intellectual pleasures they could not find among their wives or sisters. Thus the Athenian courtesans knew how to appropriate that influence which women always exert among a free and intelligent people. The courtesan filled, in Athenian history, the *rôle* which the chaste matron took in the annals of Roman history."

When Grecian society reached this stage, and concubinage disappeared, perhaps their marriage deserved the name of monogamy as much as ours does to-day. Nichols, speaking of Greece at this period, remarks: "In Athens, the most refined city of Greece, prostitution was as common as in New York, or London, or Paris; but the Athenians were too honest to disgrace and degrade their courtesans, who were the public and honored companions of their statesmen and philosophers. The Athenians did not differ from our civilizees in fact so much as in pretension. They were, in this respect, less hypocritical. The Aspasias, Phrynes, and Laises of Greece have their counterpart in every modern capital; but we have a conventional standard of morals, which, though everywhere disregarded, imposes upon us the meanness of a continual hypocrisy of a very depraving character. It was not so in the age of Pericles and Alcibiades. Solon, the great Athenian lawgiver, six hundred years before Christ, commended the young men who kept accomplished mistresses." One of the most virtuous of the Greeks, it is related, admitted an Aspasia to his philosophical entertainments, and even admitted her to his bedside to attend him in his last moments, when his own wife was excluded.

"In the time of Pericles," remarks Dr. S. Pancoast, "there appeared and flourished at Athens a class of females who gloried in their wild excesses. In the Greek colonies of Asia, temples were erected to the *earthly* Venus, and courtesans not merely tolerated but honored as priestesses of that condescending divinity. The wealthy and commercial city of Corinth was a nursery of courtesans. In the temple of Venus, as we are told by Strabo, there were no less than one thousand beautiful damsels, who, to gain the goddess's favor, prostituted themselves for hire. Hence arose the saying, 'to act the Corinthian is to commit fornication.' * * * Beauty and talents often raised great estates. A remarkable instance is that of Phryne, who offered the Thebans to rebuild the walls of their city, when demolished by Alexander, on condition that they would engrave on them this inscription: 'These walls were demolished by Alexander, but raised by Phryne, the courtesan.' * * * In Athens, the number of brothels was incredible. Solon found it necessary to allow the courtesans and prostitutes to enter the temples and forums for the purpose of public prostitution."

While the freedom and power of the courtesan were almost illimitable, those of the wife were no less circumscribed. In fact, the native women of

Greece, those who constituted the legitimate wives and daughters, were treated as children. Before marriage they were governed by the will of the father; after marriage, by that of the husband; if without a male protector, they were taken care of by the state. They were not allowed to participate with the men in public festivities. They were instruments simply for bearing children. Men were compelled to marry; a reward was offered to those who would rear large families. A husband was required by law to cohabit with his wife as often as once a month, and she could enter complaint at the public tribunal if he failed to comply therewith.

"Grecian laws concerning divorce," writes Lady Hamilton, "were different in many places. * * * The Athenians permitted divorce upon very slight occasions, but it was not permitted without a bill specifying the reason of their separation, which the magistrate must see and approve. The Athenian women were allowed to separate from their husbands upon any just ground for complaint; but they were under the necessity of appearing in person and publicly exhibiting their complaint to the archon, that, by so doing, their husbands might have an opportunity of seeing and prevailing on them to return. Plutarch relates, that Hipparete, the wife of Alcibiades, being a virtuous woman and very fond of her husband, was at last induced, from his debauched life and continued entertainment of the courtesans, to leave him and retire to her brother Callias's house. Alcibiades still continued his loose manner of living; but his wife being obliged, before she could obtain a divorce, personally to appear before the magistrate, her husband came and took her away by force, and carried her home through the forum, where she remained with him till her death, no one daring to interfere.

"It was not unusual," continues this writer, "to dissolve the marriage tie by mutual consent; in which case the parties were at liberty to dispose of themselves as each thought proper. Nor was it unusual in some parts of Greece to borrow each other's wives."

A great variety of singular customs prevailed in various parts of Greece, which I have neither time nor space to relate. The period when the courtesan was so much honored, was, I think, mainly the fourth and fifth centuries before Christ. Gradually, as Grecian and Roman civilization met, there became more or less of a blending of national characteristics, the Greeks becoming somewhat less prominent in their sexual excesses, and the Romans less exclusive and loyal to matrimonial ties. And when Greece became a Roman province about one hundred and fifty years before Christ, their system of marriage, like that of the Romans, became what might be called a loose form of monogamy; less monogamic than that of the first Romans, and less polygamic and omnigamic than that of the Grecians at the time of Pericles.

In ancient Persia, whose empire was founded by Cyrus about five hundred and sixty years before Christ, the system of marriage was undoubtedly polygamous. At the very beginning, indeed, Persia, prior to its becoming an empire, and the empire, ancient and modern, may be placed among the countries where polygamy has been sustained by law, religion, and custom. Its earliest condition may be inferred from the fact that Zoroaster, the founder of the religion of the Persians many centuries before the empire (the most authoritative writers placing his time somewhat over twelve hundred years before Christ), allowed polygamy among his followers, and further, by a perusal of the book of Esther in the Old Testament; and its later condition, by what is said in the "New American Cyclopedia" of the Golden Age of modern Persia, in the sixth century after Christ, when the monarch Chosroes II. had "fifty thousand Arab horses and *three thousand* beautiful women, the most lovely of whom was Shirin, or Irene, a Greek and a Christian, whose beauty and whose love formed the subject of a thousand poems." Persian monarchs, remarks Norton, "never had less than four hundred wives and concubines." The ancient Parthians were also polygamous before they became subject to the Persians, and continued to be after they became independent of Persia, and made for themselves a powerful empire. They were allowed marriage with sisters and mothers. The ancient Scythians, who were cotemporaneous with the Persians, practised polygamy.

Outside of these larger ancient nations, there were any number of communities and kingdoms, large and small, where polygamy was the popular form of marriage; but it will hardly interest the reader, while it will greatly consume time and space, if even a brief history of each one of them is given. I will therefore pass from the domestic history of various peoples before Christ, and come down to a period comparatively more recent, simply reminding the reader that oriental polygamy has not only passed around, but bridged over, the times of Christ and his apostles, who were supposed by many to have been inimical to the polygamic system of marriage.

The most extensive religious body springing up after Christ and sustaining the ancient institution of polygamy was that originated by Mohammed. This man was an Arab; born about the year 570 after Christ; nursed for two years by a Bedouin nurse who had fits, attributed to evil spirits; married at twenty-five to a rich woman of forty. He visited a cave frequently between his thirty-fifth and fortieth years, and therein had fits and visions. Mohammed and his wife were puzzled to know whether these visions were from good or evil spirits; but a Christian priest, named Waraka, related to Mrs. Mohammed in some way, told them how to decide this matter, and by the test he gave them, it became

evident that the visions were of divine origin, whether the fits were or not. So Mohammed hired some secretaries, and straightway made up the book of Koran.

Like Joseph Smith of our times, Mohammed met with much opposition; but he was personally as invincible as Smith's religion is inextinguishable. An amiable gentleman, by the name of Omar, went out to slay Mohammed; but instead of Mohammed falling a victim to his blade, he fell a victim to Mohammed's religion. Next, a whole caravan of Christians, from Nadjaran, taking with them one skilled in casting out evil spirits, went forth unto Mohammed, to relieve him of the devil; but instead of their possessing a sufficient number of good spirits to overcome Mohammed, he seemed to have a devil apiece for all of them; for when they met the prophet, they, too, became converts to his faith. An enraged Jewess fed Mohammed on poisoned lamb, but it only took away his health. He continued to live and extend his religion by persuasion and force of arms, till he was able to visit Mecca at the head of forty thousand pilgrims!

Some may imagine that he incorporated polygamy into his religion and practice, in consequence of his first wife being fifteen years older than himself. This is not so. It was not till after the death of his first wife, Kadijah, that he married several wives, and it seems that at his death he only left nine widows!

The religion of Mohammed, with its polygamy, has penetrated Europe and spread over Asia and Africa, until, as estimated by Hayward, in his "Book of Religion," his followers number not less than one hundred and forty millions. It appears from statistics that the spread of Mohammedanism has been proportionately greater than that of Christianity; for in the seventh century there were only about forty thousand accepting the religion of the Arabian prophet, while there were twenty-five millions accepting that of our Saviour. In the eighteenth century, according to M. Laffon de Ladebat, there were two hundred millions of Christians, by which it appears that the followers of Mohammed have been more active in proselyting than those of Jesus of Nazareth. Hayward attributes the rapid increase of Mohammedanism to its remarkable adaptation to the peculiarities of Eastern nations, and then he remarks: "To these causes of the progress of Mohammedanism we may add the bitter dissensions and cruel animosities that reigned among the Christian sects—dissensions that filled a great part of the East with carnage, assassinations, and such detestable enormities that rendered the very name of Christianity odious to many. Other causes of the sudden progress of that religion will naturally occur to such as consider attentively its spirit and genius, and the state of the world at this time."

The same writer, after describing the Mohammedan heaven with all its luxuries, remarks, "But all these glories will be eclipsed by the resplendent

and ravishing girls of Paradise, called, from their large black eyes, *Hur-al-Oyun*, the enjoyment of whose company will be the principal felicity of the faithful. These, they say, are created not of clay, as mortal women are, but of pure musk, being, as the prophet often affirms in his Koran, free from all natural impurities, of the strictest modesty, and secluded from public view in pavilions of hollow pearls, so large that, as some traditions have it, one of them will be not less than sixty miles square." One of these pearls would suit the writer better than the women of musk! The Turks and Persians, as is well known, are mainly Mohammedans.

In the turnings and overturnings of nationalities and sects after the Christian era, there was a grand mixture of polygamy, polyandry, omnigamy, and monogamy. "Polygamy," remarks Mr. Norton, "seems not to have been entirely eradicated among the Christians of the sixth century, as we find it then enacted in the canons of one of their councils, that if any one is married to many wives, he shall do penance. Even the clergy themselves in this period practised bigamy, as we find it ordained at another council held at Narbonne, that such clergymen as were bigamists should only be presbyters and deacons, and should not be allowed to marry and consecrate."

"In the eighth century," says the same writer, "Charlemagne had two wives. Sigebert and Chilperic had also a plurality, according to Gregory of Tours. But we even find an instance of bigamy and polygamy as late as the sixteenth century. Philip, a German prince of Hesse Cassel, obtained permission from Luther and a synod of six Reformers, to marry a second wife during the life of his first one, and he accordingly did so. In this remarkable case Luther exercised an authority which even the most daring of the popes in the plenitude of his apostolic power had never ventured to attempt."

Again this writer remarks, "that the celebrated John of Leyden (a leader of the Anabaptists in Munster, Germany, in 1533) announced his right to marry as many wives as he chose, following the custom of the kings of Israel, and put it in practice so far as to marry seventeen."

Passing over the bigamy or polygamy of various dissolute kings of Europe, open polygamy had made no progress in the nations of Christendom till early in the present century, when Joseph Smith founded his religion, which he claims to be Christian, and based on the Bible as well as upon the book of Mormon, which he interpreted from the golden plates excavated from a hill in Ontario County, New York. As an account of him and his followers will be given in the succeeding chapter, I will omit here the story of Mormon polygamy.

The Mormons, however, were not the first to inaugurate polygamy on American soil. "It was," says Norton, "practised among the ancient

Mexicans and Peruvians, as well as the more barbarous tribes in both North and South America. Montezuma, the emperor of Mexico, at the time of the Spanish invasion had three thousand women. The Incas in the twelfth century married only their own sisters, but were allowed a great number of concubines. The Peruvians, before the coming of the Incas, are said to have had their women in common, with no recognized marriage relation, but subsequently adopted polygamy.

"The Brazilians practised polygamy in ancient times, and I believe now do in portions of their empire. In Nicaragua, polygamy was formerly allowed, and adulterers were simply divorced. In Carabani, caziques had as many wives as they wished, and, when they made long journeys, had them stationed along the road, like post-horses, for their convenience. The other inhabitants had as many wives as they could support. Polygamy, indeed, seems to have obtained among the ancient inhabitants of the whole of Central and South America, and, as a result, little adultery or violence was committed. The aborigines of North America, though generally content with one wife, sometimes took two or three. In conclusion," remarks this writer, "it is stated on good authority that, from the creation of the world, polygamy has been the rule with four-fifths of the human race."

History of Monogamy.

If the marriage institution of Greece, as originated by Cecrops, can be regarded as monogamic, then its adoption as a national institution dates back to fifteen hundred and fifty years before Christ; and if Grecian marriage was monogamic, why may not that of the Egyptians also be regarded as such? Admitting Egyptian marriage to be monogamic, we are carried back some thirty-five hundred years before the Christian era in search of the age when this system of marriage commenced. The marriage of one man to one woman, with the license of concubinage, was doubtless one step out of polygamy, and another step toward monogamy, and in this light we must view the marriage of the ancient Egyptians and Grecians, instead of adopting it as legitimately belonging to the monogamic system.

Having placed the early Egyptian and Grecian marriages under the polygamic head, because of their concubinage, it may be said that monogamy originated in Italy between seven hundred and one thousand years before Christ, unless it can be shown that it was first practised by the barbarous tribes of Northern Europe. Traditions place its origin at least as far back as the foundation of Rome, seven hundred and fifty-three years before Christ. Monogamy, unquestionably, was originally the offspring of masculine poverty and female scarcity. The opulent polygamic tribes held the world's wealth, and bought up all the handsome women in those early

times in Asia, Northern Africa, and Southern Europe. In Northern Europe, the climate was too inhospitable, and the soil too sterile, to favor the luxury and extravagance which polygamy engendered. Hence the northern tribes of barbarians, and the poor people of African, Asiatic, and Southern European civilization, were obliged to be content with one woman, while many a luckless scalawag (then as now) was compelled to pursue "life's thorny pathway," with only a "semi-occasional" glance at one, which momentary diversion rendered him liable to stumble into the inferential brier bushes aforesaid. It is presumable, that from the agonized experience of one of those unfortunate bachelors, originated that trite adage, "There never was a rose without a thorn;" and to this day the removal of this thorn is one of the commonest feats of medicine and surgery.

Fig. 156.

THE MONOGAMIC FAMILY.

The founders of Rome were poor, hard-working people; but industry produces its fruits, and, in a little while, we find in its traditions mention made of a rich as well as a poor class, known respectively by the designation—patrician and plebeian. At this early age of Roman civilization, the civil law had nothing to do with marriage; it was an affair of the family. Custom, rather than law, took charge of the function of family organization; but custom was then, as it now is, an arbitrary ruler in all things it presumed to regulate. In the oldest form of Roman marriage, according to Paul Gide, the woman gave up all family ties on her side, on becoming a wife, and entered with all her effects into the family of her husband. After a time, there sprang up a party which opposed this absorption of the daughter and her property into the family of the husband, and custom began to allow the woman to remain at home after marriage, in consequence of which, her family was aggrandized by the industry and prosperity of the husband. For many generations these two customs co-existed, some abiding by the first, and others governing themselves by the latter one, and eventually the

former became extinct in all cases, excepting those wherein the woman was an heiress in her own right, or otherwise possessed of property belonging wholly to herself; a woman thus situated was allowed, if she chose, to become a member of the household to which her husband belonged.

When the wife remained at her father's house, she was mainly subject to his control. He could take her from the husband, punish her, or even take her life. The husband, too, had the right to whip, kill, or sell her. When the will of the husband came in conflict with that of the father, the difficulty was submitted to a tribunal composed of the relatives of the parents and friends of the wife, and finally, if necessary, to the censor, who was a public functionary, acting under no rules of law, but simply upon principles of equity. Webster defines a censor as "an officer in ancient Rome, whose business was to register the effects of the citizens, to impose taxes according to the property which each man possessed, and to inspect the manners of the citizens, with power to censure vice and immorality by inflicting a public mark of ignominy on the offender."

In the original marriage customs of the Romans, when the wife went, with all her personal effects, to the house of the parents of the husband, her own father forfeited control, and she was also removed from the influence of her relatives. Neither her family nor the censor could interfere, excepting in cases of unjust chastisement or threatened repudiation. At the death of her husband, she was placed on a level with her children as an heir to the estate, sharing equally with each one of them, as if she were a sister rather than a mother.

Even at this early day, it was almost as necessary for every marriageable girl to have a dower as it is to-day, in France, for her to have her *dot*. She might, if she chose, before marriage, hire her services out for the purpose of acquiring a dower. Falling short of this in her girlhood, she was in many instances allowed to hire out after marriage, and the fruit of this labor constituted her dower, which belonged exclusively to herself.

It has often been said that there were no divorces in Rome for the first five hundred years of her national existence. It is true that while her laws did not interfere with the liberty of divorce, it was forbidden by religion and by custom. "A man who repudiated his wife," remarks Gide, "was dishonored by the censor, and excommunicated by the priest; and the only way atonement could be made was by placing upon the altars of the divinities who presided at the union, a portion of the husband's goods. This moral penalty was more efficacious than the laws have ever been. Divorce was not illegal, but morally impossible, and," reiterating the common statement, this writer avers that, "according to all antique authors for five centuries, there was not a case of divorce." While this may be so, it is difficult to see how these antique authors can speak positively on this point, for,

according to this same writer, "under the republic of ancient times, a case of adultery and *divorce* was tried in the family *to hide the shame*." Now is Monsieur Gide, or any writer, prepared to demonstrate the supposed fact that no divorce occurred for five hundred years, when domestic discords were treated with the utmost privacy? It is certainly to be inferred from the last-quoted statement, that cases of divorce were tried; and the tribunal having been made up of the immediate family of the parties interested, with the possible intervention of the censor, is it not quite probable that occasional divorces did occur, all publicity of which was avoided, in obedience to the well-known sentiment of the people in favor of concealing matrimonial infidelity or disruption? The censor and priest, if kindly disposed to the families involved in trouble, could prevent a case from becoming public, and, of course, those pagan divinities of wood and stone, "who presided at the union," could at least be bribed to "keep *mum!*" Nevertheless, from all the light we are able to obtain concerning the early Romans, they were a pretty respectable people, or would have been, if they had treated the women as equals rather than as children, subject to the same discipline and punishment as the juvenile element of the household. [Query: If condign punishment was fashionable in those days, were the women spanked?] "Never," remarks Paul Gide, "did the Christian legislators better define marriage than did the lawgivers of ancient Rome. It is," he says, according to the pronounced Roman idea, "the union of two lives, the joining of two patrimonies, the putting in common of all temporal and religious interests. This was in the first four centuries of Rome. In this ancient notion of marriage," continues this writer, "already appear the two principles which are the foundation of modern Christian marriages, the indissolubility of the marriage tie, and monogamy."

Under the republic, the Romans were a progressive people, for before its fall, we find, according to the language of Paul Gide, "woman was no longer powerless and oppressed; she was the matron, the mother of the family; respected by the slaves, children, her own husband, and cherished by all; mistress of her own house, and extending her influence outside to the heart of popular assemblies and councils of the senate; while allowed to go everywhere, her habitual place was at home; all treasures were under her care; she educated her children, and governed her family. The father was the lord of the household; the daughter had equal rights with the son; this was the first time in woman's history that we have discovered that she had any rights. Over her was a guardian whose authority only related to her property and not her person. She had the liberty to choose her own husband, guided by the advice of her parents or friends."

During this period the growth of the republic made her a neighbor to Greece, and she soon began to feel the influence of Grecian civilization. In

fact, an interchange of laws and customs gradually took place. The Greeks learned from the Romans how to treat their wives with greater consideration, and the Romans contracted from the Grecians the vice of concubinage; but not so just as the Grecians, they treated the children of these concubines with disfavor. The Romans adopted Grecian law as originated by Solon, and gradually it crept into the management of the family. Originally, in Rome, "law," says Gide, "did not interfere with family government as in Athens, for it was thought that the family hearth was too sacred for public tribunals. . . . Roman legislation did not wish to touch the independence of the family, nor confine by legal restraint the ties which natural affection had formed." In time, however, law "penetrated the bosom of the family. It insured the woman a dower, and it constrained her to marry. It established various regulations concerning marriage and divorce; it overwhelmed with favor the couple that gave birth to the most children," and in all family matters it took an impertinent interest. I am not sure though, that, like the law of the Greeks, it required the husband to cohabit with his wife as often as once a month!

Finally, in a little less than a century and a half before Christ, Greece was wholly absorbed by the Roman republic. During those one hundred and forty-six years Rome was overrun with "new men—strangers—and her aristocracy disappeared." Radical changes from ancient usages were subsequently greatly accelerated by the conquests of Julius Cæsar. "Marriages became only passing unions of passion and convenience. Children no longer submitted to parental authority, and parricide was common." Rome grew rapacious as she grew larger, and surrounding nations that would not come voluntarily to her standard were made to submit to her rule by the sword of the conqueror. Glutton-like, she devoured all the smaller nationalities within her reach, and became sick. She would gladly have made Julius Cæsar emperor, but he fell by the hand of an assassin, forty-four years before Christ. Then came Octavius, who assumed the title of Augustus, by which he has ever since been known. With him came new laws, and, as Paul Gide ironically remarks, "a man who would judge the Romans after their laws, would not fail to think morality and the private virtues had progressed with this people from age to age, and had never shone more brightly than at the times of Augustus and Tiberius." Under Augustus, law pretended to repress divorce and punish adultery; a father was obliged to dower his daughter, and she could enter complaint against him if he did not find her a husband. The state undertook to avenge the honor of the husband. If the latter killed his wife for adultery, he was punished as a murderer; but the father could kill the guilty daughter and her paramour. The adulteress might be tried before a judge, but seven

witnesses were required to convict her. Under the empire, the personal freedom which woman acquired under the republic was, in a legal point of view, subverted; but the subversion of many of woman's privileges began to take place long before the birth of Cæsar. It remained for the latter to complete, what had been undertaken in a measure by the legislators before the change of the republic to an empire. During the reign of Augustus and Tiberius, the atmosphere was foggy with law respecting woman, marriage, and divorce, and at the same time never in the whole history of Rome had there been so much matrimonial infidelity and sexual promiscuity. It was during the reign of the former that Jesus Christ was born, and within that of the latter that he founded what is now known as the Christian religion. It was during the reign of these two emperors that Rome sought to rigorously maintain, by *law*, the exemplary matrimonial life which had in the early days of the republic been sustained without law. It had swallowed the most heterogeneous mixtures of laws in absorbing and conquering other powers, so that, while its sick stomach was "throwing up" some laws, it was gobbling down any quantity of others, and nothing scarcely was talked of by the people of those times excepting the question as to the true status of woman, the proper relations of the sexes in marriage, divorce, adultery, and the law—law—law! Then the anarchy among the Jews, which was inaugurated by Augustus, at the death of Herod the Great, by the division, among Herod's three sons, of the territory ruled by the father, was at its very height.

This bit of history will account, in the minds of those not before acquainted with it, for the continual harping of the scribes and Pharisees, Sadducees, and all sorts of cees, upon the *law* in these matters, as found in the New Testament. Jesus of Nazareth was set upon by them as soon as he began his ministry, and while repeatedly telling them that there would be no marriage in heaven, he taught them to respect the laws of the Cæsars, and, above all things, the compacts they solemnly entered into with women when assuming the marriage relation. Our Saviour evinced a disposition to avoid, as far as possible, the consideration or promulgation of rules bearing upon the *details* of human action, for such was the bigotry and intolerance of the people, that their already inflamed passions would only have been more furiously manifested against him, if a word inimical to the Cæsars or their laws could have been seized upon for his condemnation. Hence, he was content to enunciate principles broad enough to cover all the rules which should govern the conduct of the human family, well knowing that, in process of time, the seed of truth which he was planting would spring up, and grow and ripen from generation to generation, as the human race progressed. When pressed to answer impertinent questions, his answers were then, as they are to-day, variously interpreted. Some claim now that he did

not prohibit polygamy, and that the example of Moses and the prophets favored it; others, that he commanded the people to observe the monogamic principle; still others, that he believed marriage to be simply a necessary evil, which time and progress would remedy.

It will be interesting to stop at this point in Roman history, and take a peep at a few domestic views from the northward, through the historical stereoscope furnished by Tacitus. Judging from the accounts given by this historian in the first century, monogamy, or the marriage of one man to one woman, was probably in vogue among the northern barbarians prior to the Christian era, and possibly at the very time the Romans, many centuries before Christ, were making an experiment of this system of marriage.

It seems the ancient Germans attributed the origin of their marriage system to "Odin." When he lived is a problem I have been unable to solve, after rummaging all the authorities within my reach; but as Tacitus wrote his treatise on the "Manners and Customs of the Germans" in the first century, and Odin was then only to be heard of in the ancient traditions of his people, he must have been decidedly an antique chap, and possibly drank samples of tea *expressed* to him by old Fu-hi over two thousand years before Christ. He may also have been the inventor of "Lager," as well as of German marriage. We may infer from the character of the latter, that he was something of a woman's rights man, for while in oriental countries woman was considered incapable because of moral weakness, in Germany she was simply regarded inferior to man in physical strength, and was admitted to the councils of the father, husband, and brother. If she could not with her own hand defend herself, she could command the masculine hand of some relative or friend to do so, and while she could not be the guardian of her children, she was consulted on all the acts appertaining to the governance of her offspring.

The ancient Germans had a superstitious confidence in the moral if not supernatural power of woman; so much so, indeed, that when in peril if they found their wives and daughters near them, they were inspired with new courage. Hence, the women accompanied them to the field of battle, and though they did not physically participate in the contest, they gave to their fathers, husbands, and sons, moral support. Not alone in the battles of contesting tribes were they the cherished companions of men. They mingled with them in all their amusements and exercises, and at the beer tables filled their cups and drank with them. We see in this the origin of the custom now common among the German people, of men, women, and children congregating at the beer gardens in this country as well as in Europe.

In their marriage usages the father disposed of the hand of the daughter; if he were absent or dead, then the elder brother officiated, the mother participating with him; if the mother was a widow without sons, it was her exclusive prerogative to give her daughter's hand in marriage.

Family matters were not regulated by the state. Families organized and defended themselves, and the state was composed of these distinct families. Those only who could bear arms were allowed to rule. The monogamic system of marriage exclusively prevailed among these people. "The ancient Germans," remarks Norton, "were such strict monogamists, that they held it as a kind of polygamy for a woman to marry a second husband after the death of the first." If a husband did an injury to his wife, he was pursued by her family, and, if taken, was compelled to pay damages. The wife could have a separation from her husband if his habits were corrupt, and her parents defended her from any abuse of the marital power; these barbarians abhorred adultery, and the women were so chaste that their virtues were celebrated by their husbands and fathers. As Christianity, clothed in the civilization of the Romans, permeated these people, they were as much shocked at the vices of the Romans as the latter were surprised at the virtues of the Germans.

We might next take a peep up into the cold regions of Scandinavia, where, also, monogamy was strictly practised; but we will reserve the picture of Scandinavian domestic life for a future paragraph, for such was her aversion to the Romans, she would not accept any thing from them—not even Christianity, until about the tenth century, and then it made little headway for several centuries after. We will therefore return, like the oft-snubbed Romans, from the honest but barbarous shores of the Baltic, and see how marriage in the Old Empire flourishes.

Here we find little change. The national marriage system remains practically the same, although there may be greater local diversities than formerly. However ostensibly rigid the laws may be, sexual excess and matrimonial perfidy were never more rampant than during the reign of Nero, commencing A. D. 54. In the latter days of the pagan empire, some measures are adopted to repress the profligacy that so extensively prevails. Domitian enforces the old Scantinian law against unnatural love. This refers to the love of a man for a man, or a woman for a woman, or of those of either sex for animals below them. Vespasian moderates the luxury of the court. Macrinus requires those who have committed adultery to be bound together and burned alive. Hadrian condemns the practice of men and women bathing together, but it remains for Constantine to suppress this practice altogether. Christianity is slowly spreading, though encountering great opposition. During the first century, according to the "New American Cyclopedia," "it enters into nearly all the countries bordering on the Mediterranean Sea, especially in Asia Minor, Greece, Italy, and the north of Africa," but we must go down to the beginning of the fourth century before it is strong enough to give to the nation a Christian emperor.

Constantine the Great begins his rule in 306, and five years thereafter

embraces Christianity; in twenty years more transfers the seat of government from Rome to Byzantium (now Constantinople). "Transformed by the Greek law," remarks Gide, "Roman law *had* become the prevailing rule of all nations. Finally transformed by the Christian law, it was about to become the common law of all civilized peoples." But how do we find marriage under the new Christian *régime?* Strange enough! The old pagan law urged marriage; the new Christian law urged celibacy.

St. Jerome, who flourished in the fourth century, and to whom the Christian world is greatly indebted for the early translations and revisions of the Old and New Testaments, and other Christian works, said: "Let us put the hand to the axe, and cut by its roots the sterile tree of marriage. God had well permitted marriage at the commencement of the world, but Jesus Christ and Mary have consecrated virginity." "It was," says Gide, "the accepted opinion of the Fathers of the Church of the fourth century, that marriage was the consequence of the original sin, and that, without the first transgression, 'God' would have provided otherwise for the perpetuation of human kind." This doctrine would hardly have suited the modern old lady, who was told that a Yankee had invented a machine for manufacturing babies, and thereupon responded, that she thought the old-fashioned way was the best; nor is it exactly in harmony with the law governing nearly the whole animal kingdom, only the human portion of which ate of that troublesome apple. But let us resume.

"From the fourth century," continues Gide, "such was the doctrine of the universal church, and the sanctity of the conjugal union had for defenders only some heretics. From the writings of the Fathers this doctrine soon passed into a law. The church forbade marriage to its clergymen, and, not being able to control the simple faithful, they applied themselves to restraining them. For though they allowed it was permitted to marry once, all second marriages, they claimed, were at the bottom only adultery. But ecclesiastical canons finally tempered this a little. They tolerated, though with marked disfavor, a second union in case of the death of the first wife, but they forbade absolutely this course in case of repudiation or divorce. To employ modern language, they substituted for divorce the separation of body. Later, the interpreters of the canonic law make one step more in this dangerous path; the law imposes restrictions to the relations of the couple, and starting always from the principle 'that marriage is a necessary evil,' they deduce from it, with the subtle logic familiar to casuists, the proposition that licit conjugal relations are those which have for their object only the procreation of children." It was unfortunate for the early Christians that old St. Paul, through some love-disappointment in youth probably, was an old bachelor, and always threw his influence in favor of celibacy. He was like the fox who lost his tail, and would have pre-

ferred that all other foxes should get along without this caudal extremity. He wrote to the Corinthians, "It is good for a man not to touch a woman." Again he said, "For I would all men were even as I myself; but every man hath his proper gift of God, one after this manner and another after that. I say therefore to the unmarried and widows, it is good for them if they bide even as I. But if they cannot contain, let them marry; for it is better to marry than to burn." In giving this advice, however, he said he spoke by permission and not of commandment. There is a great deal of individuality in all of St. Paul's writings, and it is not likely that this apostle was so much different from other men as not to have been considerably influenced by his personal experience and prejudice in giving advice to his hearers. The Shaker sect we have to-day, which advocates celibacy, was founded by a woman, Ann Lee, who married and had four children, all of whom, husband included, died; and there can be no doubt that her disagreeable experience in married life so wrought upon her mind as to lead her to think intercourse with the opposite sex was sinful, or at least attended with trouble and sorrow; and she thereupon organized a society which abjured marriage and all intercourse sexually with man. We will return, however, from this digression to our history.

It was under the Christian emperors that the patrimony of the family was made to descend to the children. It was the opinion of the Christian rulers that parents should benefit and enrich their children, instead of the latter laboring for the aggrandizement of parents as under ancient Roman usage. This idea carried in the right direction, *i. e.* their proper propagation, and moral and physical development, rather than material advancement, would better represent the true Christian spirit.

The Christian emperors, according to Gide, "were the first to encourage the family to conceal the disgrace of adultery, or to take into their own hands the right to avenge it by the destruction of the invader. Constantine discouraged and tried to destroy the system of concubinage. He made bastards odious, and proposed to legitimatize the children of those living in this relation who would marry." This, of course, was simply to remedy one evil by the substitution of another, for, be it constantly borne in mind, celibacy was rewarded by the early Christian rulers as much as marriage was by the old pagan legislators. The spirit of those times was, first: if possible, make the people celibates; secondly: if they married, the marriage must be regarded as indissoluble; and thirdly: if separation occurred, the parties must not again marry. It was disposed to remove some of the disabilities which the earlier emperors had imposed upon woman so far as related to her control and power to sell property; but comparatively little freedom was allowed to the sex. Cats were allowed to have kittens, and women enjoying in a measure the same freedom, were allowed to have babies. In

direct antagonism to the rules of the church, however, were the practices of the clergy, for in 370 the Emperor Valentinian, shocked at the prevalence of their vice and licentiousness, found it necessary to enact a law visiting severe punishment "on every ecclesiastic who visited the houses of widows and virgins."

During the period from the fifth to the fifteenth century, known by the designation of the "Dark Ages," the civilization of the early pagans, that of the Christians, that of the Mohammedans, and the social and religious inventions of the northern barbarians, may be said to have been thrown into one immense heap of compost, from which later customs and religious and political institutions sprung. Polygamy, monogamy, omnigamy, polyandry, prostitution, and all sorts of customs relating to the intercourse of the sexes, prevailed in Europe as well as in Asia and Africa. Even Christianity was almost obliterated; the sexual morality of those ages may be inferred from one of the edicts of Charlemagne, which was as follows:

"We have been informed, to our great horror, that many monks are addicted to debauchery and all sorts of vile abominations, even to unnatural sins. We forbid all such practices in the most solemn manner; and hereby make known that all monks who indulge in the gratification of such lusts will be punished by us so severely, that no Christian will ever care to commit such excesses again. We command our monks to cease swarming about the country, and we forbid our nuns to practise fornication and intoxication. We shall not allow them any longer to be whores, thieves, murderers, etc.; to spend their time in debauchery and singing improper songs; priests are herewith forbidden to haunt the taverns and market-places for the purpose of seducing mothers and daughters," etc.

A newspaper critic, in a review of a work by Henry C. Lee, giving "An Historical Sketch of Sacerdotal Celibacy in the Christian Church," presents further evidence to the same effect at a still later period. "During a succession of centuries," this writer remarks, "the enforcement of the celibate discipline was attempted with various results; but not until after the fourth Council of Lateran, in 1215, do we cease to find frequent instances of marriage among those devoted to holy orders. At this date the triumph of sacerdotalism may be regarded as complete. In theory, at least, all who had assumed the sacred ministry were exclusively devoted to the solemn service. The effect was doubtless to strengthen the pretensions of the church to spiritual supremacy; but the influence on the morals of the clergy only repeated the deplorable vices of past centuries. There had not been wanting voices of awful rebuke to denounce the ambition of the church in imposing such unnatural restrictions. St. Bernard, the most conspicuous ecclesiastic of the day, uttered a vigorous protest against the endeavor to enforce a purity at war with the instincts of human nature. Deprive the

church of honorable marriage, he insisted, and you fill her with concubinage, incest, and all manner of nameless vice and uncleanness. His warnings were fulfilled to the letter. Notorious illicit unions, or still more degrading secret licentiousness, became the universal vice of the church throughout Christendom.

"The degradation of the clergy became so complete that even an organized system of concubinage was welcomed by the friends of virtue as a safeguard against promiscuous licentiousness. It was deemed preferable to the mischief which the unbridled passions of the pastor might inflict on his flock. Even Chancellor Gerson, the celebrated advocate of mystical asceticism, did not hesitate to recommend concubinage; which, though scandalous in itself, might serve as a preventive to greater scandals. In some of the Swiss cantons it was the custom to oblige a new pastor, on entering upon his functions, to select a female companion, as a necessary protection to the virtue of his parishioners, and the peace of the families intrusted to his spiritual direction. Indeed, it appears, on the authority of the Council of Palencia, in 1322, that such a practice was not uncommon in Spain. A dreadful encouragement to the wantonness of the clergy was presented by the example of the supreme authorities at Rome. Sacerdotal marriage had been scarcely driven entirely from the church when the morals of the Roman ecclesiastics became the disgrace of Christendom. The removal of the Papal See to Avignon, during the period of the Great Schism, only made matters worse. We have a remarkable picture of society at that time by Petrarch. He could find no language of sufficient strength to express his abhorrence of that ecclesiastical Babylon, though he was restrained by fear from giving full utterance to his feelings. Chastity was a reproach, and licentiousness a virtue. The aged prelates surpassed their younger brethren in wickedness, as in years. The vilest crimes were the pastimes of pontifical ease. Juvenal or Brantôme describe no scenes of more shameless corruption."

According to Lecky, "an Italian bishop of the tenth century, epigrammatically described the morals of his time, when he declared that if he were to enforce the canons against unchaste people administering ecclesiastical rites, no one would be left in the church except the boys; and if he were to observe the canons against bastards, these also must be excluded! A tax, called cullagium, which was in fact a license to clergymen to keep concubines, was during several centuries systematically levied by princes."

There was, however, throughout all this period, a class of ascetics, who held out firmly against not only marriage, but also against all carnal intercourse. "Thus St. Jerome relates an incredible story of a young Christian being, in the Diocletian persecution, bound with ribbons of silk in the midst of a lovely garden, surrounded by every thing that could charm the ear and the eye, while a beautiful courtesan assailed him with her bland-

ishments. Whereupon, he protected himself by biting out his tongue and spitting it in her face."

"The object of the ascetics," remarks Lecky, "was to attract men to a life of virginity, and, as a necessary consequence, marriage was treated as an inferior state. The relation which nature has designed for the noble purpose of repairing the ravages of death, which, as Linnæus has shown extends even through the world of flowers, was invariably treated as a consequence of the fall of Adam, and marriage was regarded almost exclusively in its lowest aspect. Whenever any strong religious fervor fell upon a husband or wife, its first effect was to make a happy union impossible. The more religious partner immediately desired to live a life of solitary asceticism, or, at least, if no ostensible separation took place, an unnatural life of separation in marriage. Saint Nilus, when he had already two children, was seized with a longing for the prevailing asceticism, and his wife was persuaded, after many tears, to consent to their separation. Saint Ammon, on the night of his marriage, proceeded to greet his bride with an harangue upon the evils of the marriage state, and they agreed, in consequence, at once to separate. Saint Melania labored long and earnestly to induce her husband to allow her to desert his bed, before he would consent. Saint Abraham ran away from his wife on the night of his marriage. Nominal marriages, in which the partners agreed to shun the marriage bed, became not uncommon. The Emperor Henry II., Edward the Confessor, of England, and Alphonso II., of Spain, gave examples of it."

We therefore see that the asceticism of the few was as extreme and as mischievous as the licentiousness of the many. "The extent to which the ascetic feeling was carried," says Lecky, "is shown by the famous vision of Alberic in the twelfth century, in which a special place of torture, consisting of a lake of mingled lead, pitch, and resin, is represented as existing in hell, for the punishment of married people who had lain together during the church festivities or fast days."

The new social systems of Europe that emerged from the grand heterogeneous "stew" of the Middle Ages, mainly adopted ostensible monogamy. Ancient Scandinavia, however, was not involved in the European Salmagundi of those times, for she had all along possessed and maintained fixed institutions of her own. Her ice-bound coast isolated her from the war and carnage, and the social and sexual revolutions of her southern neighbors; and as she looked down upon their miseries she was content to remain in her isolation. Nor would she to any great extent accept Christianity, till, in the sixteenth century, it came to her cleansed by the reformation of Luther, and to-day Norway and Sweden are mainly Protestant.

The position of the Scandinavian women was rather lowered than bettered by the influx of the new civilization. In no country or age had she

been treated with so much justice. With these barbarous people a period of majority was recognized among women as well as among men, and a woman could own and dispose of property after becoming of age; and although she could not defend or prosecute a legal action in person, she could choose or change her male representative at will. The property of the wife was not liable to be seized for the debts of the husband, unless she had jointly with him contracted the obligation. *What was earned by the husband, or by the united efforts of the couple, was one-half her property, and this much, or at least one-third, was set off to her in case of separation.*

Monogamy had been their system of marriage from earliest antiquity, and their marriages were preceded by betrothals of a most solemn and obligatory character. According to Gide, the man said to the woman: "To thee the honor and rights of wife—to thee the keys of my house—the half of my bed —the third of all that which I possess, and all that which we may acquire together." It is proper to remark that among some of the tribes one-half instead of one-third was stipulated to be the wife's portion. Although a man, on taking a wife, usually paid something to her guardian for his trouble in taking care of her during the period of her minority, wives were in no case bought nor women sold among these people. Although in marriage a woman surrendered the control of her property to her husband, in case of separation he was obliged to return it or its equivalent, together with half of the products of their mutual industry.

The early Scandinavians had religious teachers and bishops, although they were neither Christian nor Hebrew. These religious functionaries had nothing to do with marrying people, but in case of matrimonial infelicity, their interposition was sought. If a husband was dissipated, by appeal to the bishop, the wife might have separation of property without dissolution of marriage; or, by his decree, entire separation. There was no law or rule to prevent separation when it was mutually conceded to be best. The wife could return to her father's family if she wished, and with them make a united effort against any meditated wrong of the husband. If she became a widow by death or separation, she had personal control of her property and could again marry without the consent of her family.

The people of Norway and Sweden have changed but little in ages, and most of their institutions differ little from what they were hundreds of years ago; in their social habits they have taken on the excesses and vices of Roman and Grecian civilization.

With this account of the early Scandinavians, I shall close the history of monogamy, as any one at all familiar with modern literature can, with the aid of the next chapter, trace its further history to the present time. As the reader carefully peruses the foregoing pages, he readily observes the origin of many of the customs of to-day, and the female reader will perceive quite as

readily that what freedom her sex enjoys in the 19th century, is mostly derived from the institutions of the ancient Germans and Scandinavians. Without assuming, as most boys do, to know more than our Father, I cannot repress the expression of the opinion that if Christianity had been sown among the virtuous and vigorous barbarians of Northern Europe, rather than in the corrupt and decaying civilization of Rome, the Goths and Vandals would have carried it with triumphant banners over the crumbling Roman empire, and the whole civilized world would now be enjoying the light rather than the mist of Christianity. As it is, to Germany under God belongs the honor of filtering it to some extent from the scum with which it was mixed when it came up from the Romans. Martin Luther was a German.

Historical Chips.

When the pioneer builds his log-cabin, chips accumulate. In building this history of marriage, I find myself surrounded with entertaining facts which could not relevantly find place in the narrative. We will gather these up in one pile at the close, and call them the "historical chips." They exhibit the odd customs of various peoples in different ages, and may lead the reader to analyze our own, to see if some of them are not, to use a forcible expression, *ridiculous*. It may certainly be set down as a palpable fact, that every thing in our customs which is in any way prejudicial to our moral and physical health, and true happiness, may some day receive the just ridicule of posterity. I shall place quotation marks before and after each of the various facts presented, for though the phraseology is sometimes my own, the matter is derived and condensed from various sources, and to save space and the repetition of names, I will present my authorities in a lump. They are, then, Gide, Picart, Montfaucon, Alexander, Lecky, Lady Hamilton, Nichols, Norton, etc.

Fig. 157.

"CHIPS."

"Betrothing and espousals were held at night or at day-break among the Romans, and never at a period of earthquake or stormy weather. The pledge given by the groom to the bride was an iron ring without a stone; a crow was often offered as a sacrifice among the ceremonies, it being considered a bird of good omen, from the popular belief that when it had lost its mate it always remained in a state of celibacy. Another ceremony was to comb the hair of the bride, and divide the locks with the point of a spear which had been dipped in the blood of a gladiator, as an omen that she would be the mother of valiant offspring, and also that she was under the dominion of her husband. The Romans, too, washed the feet of their newly married women, as an emblem of that purity which was required of them when they entered the marriage state. At one time there was a law that restrained a Roman from marrying any one who was not a Roman, or a denizen of Rome. Nor were senators allowed to marry their daughters to the sons of plebeians, nor nobles to freedmen."

"The parable of the virgins—that at midnight there was a cry made: 'Behold the bridegroom cometh! Go ye out to meet him,' is explained by a custom of the nations bordering on Judea, which was for the bridegroom and bride to absent themselves from their house until midnight, when they returned, and were received with loud shouts, music, and rejoicing."

"Formerly, among the peasants of Great Britain, when a bride was brought to the door of the bridegroom's house, a cake was broken over her head, for the fragments of which the attendants scrambled. These fragments were laid under the pillows of the young men and maidens, and were supposed to be endowed with a power of making them dream of their future wives and husbands. The latter part of this custom has come down to our own times, and is commonly practised half in jest and half in earnest, after weddings."

"The custom of betrothal seems to have originated in the very earliest ages; children were betrothed in their infancy, to strengthen families by binding them together. According to the Talmud, there were three ways of betrothing. First, by written contract; second, by a verbal agreement in the presence of witnesses, and made more binding by the presentation of a piece of money; a third, by the parties simply uniting and living as husband and wife, which was considered as a tacit agreement. These three forms were the origin of the common law in regard to contracts and partnerships of every sort."

"Among the Romans, a long time prior to the rise of the empire, their manners were more rigid than those of our Puritan fathers. A senator was censured for indecency, because he kissed his wife in the presence of their daughter. It was, moreover, considered disgraceful for a Roman mother to delegate to a nurse the duty of suckling her child. The courtesan class, at that time, though probably numerous and certainly uncontrolled, were

regarded with much contempt. The disgrace of publicly professing themselves members of it was believed to be a sufficient punishment, and an old law, which was probably intended to teach in symbol the duties of married life, enjoined that no such person should touch the altar of Juno. It was related of a certain ædile, that he failed to obtain redress for an assault which had been made upon him, because it had occurred in a house of ill fame, in which it was disgraceful for a Roman magistrate to be found. The sanctity of female purity was believed to be attested by all nature. The most savage animal became tame before a virgin. When a woman walked naked around a field, caterpillars and all loathsome insects fell dead before her. It was said, drowned men floated on their backs and drowned women on their faces; and this, in the opinion of Roman naturalists, was due to the superior purity of the latter."

"An inundation of Eastern luxury and Eastern morals near the close of the republic and the rise of the empire submerged all the old habits of austere simplicity of the Romans. The civil wars and the empire degraded the character of the people, and *the exaggerated prudery of republican manners only served to make the rebound into vice the more irresistible.* In the fierce outburst of ungovernable and almost frantic depravity that marked this evil period, the violations of female virtue were infamously prominent. The slaves were chosen from the most voluptuous provinces of the empire; the games of Flora, in which races of naked courtesans were exhibited; the pantomimes, which derived their charms chiefly from the audacious indecencies of the actors; the influx of the Greek and Asiatic courtesans, who were attracted by the wealth of the Roman metropolis; licentious paintings, which began to adorn their houses—all these causes, combining with the intoxication of great wealth suddenly acquired, with the disruption through many causes of all the ancient habits and beliefs, etc., had their part in preparing those orgies of vice which the writers of the empire reveal."

"The extreme coarseness of the Roman disposition prevented sensuality from assuming that æsthetic character which had made it in Greece the parent of art, and had very profoundly modified its influence; while the passion for gladiatorial shows often allied it somewhat unnaturally with cruelty." "There have certainly been many periods in history," says Lecky, "when virtue was more rare than under the Cæsars; but there has probably never been a period when vice was more extravagant or uncontrolled."

"There was a disposition during the reign of Augustus to avoid marriage, which this emperor attempted in vain to arrest by his laws against celibacy, and by conferring many privileges on the fathers of three children. The disposition to avoid the annoyances and responsibilities of marriage evidently existed before the close of the republic. A singularly curious

speech is preserved, which is said to have been delivered on this subject by Metellus Numicus. 'If, Romans,' he said, 'we could live without wives, we should all keep free from that source of trouble; but since Nature has ordained that men can neither live sufficiently agreeably with wives, nor at all without them, let us consult the perpetual endurance of our race, rather than our own brief enjoyment.'"

"The Romans admitted three kinds of marriage: 'Confarreatio,' which was accompanied by the most awful religious ceremonies, was practically indissoluble, and was jealously restricted to patricians; the 'coemtio,' which was purely civil, which derived its name from a symbolical sale, and which, like the preceding form, gave the husband complete authority over the person and property of his wife; and the 'usus,' which was effected by a simple declaration of a determination to cohabit. This last form of marriage became general in the empire. Cicero evidently regarded sexual intercourse necessary for the physical health of at least young men. He, of course, like every other masculine legislator, did not express himself as to the necessities of young women. 'If there be any one,' he says, 'who thinks that young men should be altogether restrained from the love of courtesans, he is indeed very severe. I am not prepared to deny his position; but he differs not only from the license of our age, but also from the customs and allowances of our ancestors. When, indeed, was it not done? When was it blamed? When was it not allowed? When was that which is now lawful not lawful?' Alexander Severus, who of all the Roman emperors was probably the most energetic in legislating against vice, when appointing a provincial governor, besides providing him with horses and servants, if he was unmarried also procured for him a concubine, 'because,' as the historian very gravely observes, 'it is impossible that he could exist without one.'"

"The Romish Christian Fathers seem to have thought dissolution of marriage was not lawful on account of the adultery of the husband; and that it was not absolutely unlawful, though not commendable, for a husband whose wife had committed adultery, to remarry. Charlemagne pronounced divorce to be criminal, but did not venture to make it penal; he practised it himself."

"After the triumph of the Christian Church, the intermarriage of Jews and Christians was made a capital offence, and was stigmatized by the law as adultery."

"It is related, that at Babylon, a law compelled every woman, at least once in her life, to make a public sacrifice in the temple of Venus; and that in Lydia and Cyprus, no woman was allowed to become the exclusive wife of one man until she had accumulated a dowry by public prostitution."

"The wives of Formosa, in olden times, were not permitted to have children until they were six or seven and thirty years old; this custom may have

become modified through the advance of civilization; to enforce rigidly the old custom, certain women, delegated as priestesses, performed abortions upon those who became pregnant at an early age."

"The object of the laws instituted by Julian, in the fourth century, was to preserve the Roman blood from corruption, and still further, to degrade prostitutes. These aims were partially attained by prohibiting the intermarriage of citizens with the relatives or descendants of prostitutes, by exposing adulterers to a severe penalty, and declaring the tolerant husband an accomplice; by laying penalties on bachelors, and married men without children."

"It used to be the custom of the Russians to crown the bride with a garland of wormwood, as typifying the bitterness of the marriage state. After the marriage, the bride and groom were allowed to remain together for two hours, when they were visited by a deputation of old women, who came to search for the signs of the bride's virginity; if these were apparent, the young lady tied up her hair, which before the consummation hung in loose tresses over her shoulders. She was then allowed to visit her mother and demand of her her marriage portion. It was the custom of both sexes of these people, not more than half a century ago, to bathe together. A writer of those days related what he had seen as follows: 'I am only just returned from being a spectator of one of their customs, at which I could not help being a little surprised; it was a promiscuous bath of not less than two hundred persons of both sexes. There are several of these public bagnios in Petersburg, and every visitor pays a few copecks for admittance. There are, indeed, separate spaces intended for the men and women; but they seem quite regardless of this distinction, and sit or bathe in a state of absolute nudity among each other.' In those days, if a woman was barren, the husband generally persuaded her to retire to a convent; and if he did not succeed by fair means, he was at liberty to whip her into condescension. If a woman killed her husband while he was chastising her, she was buried in the ground with her head uncovered, and in this state left to perish; in some instances they remained several days in this position before death relieved them. In the early part of the present century, however, the very attempt to procure abortion was esteemed a capital crime in woman; if twins were born, it was required that one of the innocents should be destroyed."

"As has been before mentioned, the institution of marriage in China was originated by Fu-hi. He ordered that the men should distinguish themselves from the women by their dress; and his laws against consanguineous marriage were so severe, that they could not marry a wife of the same name though the relationship were ever so distant. This custom is said to be strictly observed to this day."

"In ancient Sparta the function of woman was to give strong and healthy

children to the state; and it was ordered that old or infirm husbands should cede their young wives to strong men who could produce vigorous soldiers for the Spartan armies. Young men and women ran races, wrestled, and in a nude state bathed together; and it was adjudged that a man had the best right to a woman who was the most suitable to become the father of her children. Once, when a Spartan army had been absent for a long period, a delegation was selected and sent home to perform the duties of husbands for all."

"The Athenians bestowed no considerable posts, such as governors and ambassadors, on those who were unmarried, or who had not lands and possessions. January was the month when nuptials were mostly celebrated, and the fourth day was considered the most fortunate."

"Infidelity, among the orientals, consisted not in going with other women, but in the husband neglecting his own wife, and not discharging toward her conjugal duties. The state not only required that a man should be a husband, but also a father."

"Under Hadrian, A. D. 117, woman first obtained the power to make a will. Under Marcus Aurelius, in 171, the children of a woman inherited her property by law. Among the Mussulmans the husband is obliged to leave a dower to the wife he forsakes; if the marriage is broken by the death of the husband, his heirs are obliged to protect and support the widow. Manon first prohibited the buying of wives in India, and later the prohibition extended throughout Eastern Asia, and later still the same thing was effected in Western Asia. In the Talmud, as in the Koran, it was no longer to the father, but to the girl herself that the man gave presents when about to become her husband; and the price of a wife had been changed to a kind of dower for her good."

"In China, it used to be the custom for one of the public officers to cause to be assembled, in a public square, all men who were thirty years of age, and all women who were twenty, who were not married, and have them punished."

"Polygamy is an institution which has remained unchanged throughout the whole East, through all changes of time, races, religion, and climate. Those even who have given to Asia the purest laws—Zoroaster and Moses even—were obliged to make their rigid doctrines conform with this custom. Polygamy is an institution characteristic to Asia, as monogamy is of Europe. Montesquieu seems to admit that in warm climates it is natural to have many wives, and this for the following reasons: In these countries more girls than boys are born; it costs less to support many wives and a numerous progeny. But that which proves that it exists in all climates and all zones, is, that it is found among the Indians of the two Americas, the Tartars of the two Russias, and Kamschatka, as well as in the heat of the

tropics." "It is not," remarks Paul Gide, "the result of climate and circumstances, but a certain state of civilization, or rather of barbarism."

"Under the law of Moses, marriage, even with polygamy, and the facility of divorce, might be insufficient to give heirs to a family; the union might be unfruitful through the fault of the husband." The Hebrews, however, claiming greater morality on the score of detesting adultery, but in reality feeling simply greater jealousy of their women than the people of India, did not allow sharing of conjugal rights, but if husbands, while living, could not give these rights to a brother, they transmitted them to this relative at death; the widow passed with the property into the hands of the brother, who, it was thought, should marry her, and give posterity to the departed. If he failed in this, and refused to marry the woman, he was dishonored in the eyes of the people, and forfeited his inheritance, which went to the next nearest relative. If a widower left no wife, but did leave a daughter, she went with the property, in the same way, and the first male child took the name of her father. "Among the Romans," says the missionary Casalis, "the wife was the sister of the husband's children; when a father spoke of himself and children, the wife was always considered among the latter."

Captain Cook, after his voyage round the world, said of the natives of Oceanica, "that although they were religious, and believed in the immortality of the soul, they seemed strangers to all notions of marriage, or of family, or to even any feeling of modesty." Other travelers confirm this account. "Among other savage tribes the women possess some authority. Among the tribes of the Tonga Islands, and among some of those of the West Indies, the children belong to their mother, and not to the father; the women participated in all manual labor: rowed the boats, waged war, and advised in council."

"The law of marriage among the Philistines was very crude and illy regulated, as appears from the fact that the father-in-law of Samson gave away his daughter Delilah to another husband, upon Samson being some time absent from her."

"The ancient Assyrians assembled together once every year all the marriageable girls, who were then put up for sale, one after another, by the public crier; the amount received from the sale of the prettier ones was divided up into dowries for those who, by deformity, or other reasons, could find no purchasers. These dowries, in turn, were employed by such unfortunates in the purchase of husbands, or in influencing men to marry them."

"Among all the nations of antiquity, marriage was looked upon as purely a civil contract, no priest or prophet having any thing to do with its celebration."

"It used to be the practice of the Turks, during the festival of the Bayram,

to give their wives the privilege of going abroad closely veiled, and without an attendant. This liberty they improved very extensively in illicit intimacies with the Christians at taverns and other public places, as they managed to take out under their clothes a change of attire, with which they disguised themselves. It is related that on one occasion a young Frenchman, whose acquaintance was thus formed by a Turkish lady of quality, was, by the aid of a bribed Jew, duly installed in woman's attire, in the household of the old Turk, as a servant, and while there, the favorite wife became a mother, much to the gratification of the husband, who had supposed himself incapable of becoming a father. When the young man's beard began to grow, he was compelled to escape to avoid detection, but, when he left, his mistress loaded him with jewels."

"Formerly, it was a custom to examine into a person's procreative abilities, either in the presence of a spiritual or secular judge, and several surgeons and matrons; but it was abolished in France in 1677, after having been observed for nearly one hundred and twenty years. Justinian, one of the early emperors, felt called upon to forbid this and other such customs enacted for examining candidates for matrimony."

"Lacedæmonians were remarkable for their severity against those that deferred marriage, as well as those who abstained therefrom. No man among them could live singly beyond the time limited by their lawgiver, without incurring several penalties, as: first, the magistrates commanded such ones every winter to run around the public forum quite naked, and, to increase their shame, they sang a song, the words of which aggravated their crime, and exposed them to ridicule; another was to exclude them from those exercises in which, according to the Spartan custom, young virgins contended naked; a third penalty was inflicted upon a certain solemnity, wherein the women dragged them around the altar, beating them all the time with their fists."

"In Rome, during the empire, under the Cæsars, the Roman maidens could not walk through the streets without seeing temples raised to the honor of Venus; that Venus who was the mother of Rome, as the patroness of illicit pleasures; in every field, and in many a square, statues of Priapus, or, in other words, statues fashioned in the image of the procreative organs, presented themselves to view, often surrounded by pious matrons in quest of favor from the god."

"The Jews thought so strongly of the importance of marriage, that they counted neither man nor woman complete alone, and the man who did not produce offspring was in their view a homicide. Among the Brahmins, the first three castes chose their wives before they had arrived at puberty, and it was considered a disgrace among them to pass that period without being married. Among the American Indians, in early times, particularly those

located in Canada, and by Hudson's Bay, barrenness was considered the chief grounds for divorce. In China the increase of population was thought to be of so much importance to the state, that a bachelor of twenty was pointed at and ridiculed as an object of contempt. Throughout the whole history of marriage, we find, in all countries, the desire of fruitfulness held up as the chief end, until later civilization, with its accompanying education of the female sex, brought other tastes into play; it would seem that the sole end of woman was to bear children; thus, at the marriage ceremonies in many countries, brides were strewn with hops, and other flowers and plants noted for fruitfulness; and the heads of bridegrooms were decorated with figs and other fruits known to be prolific."

"In the Spanish dominions, in early times, females were reckoned marriageable at twelve, and males at fourteen; and nothing was more common in that country, than for a husband and wife to be met with, whose united ages would not exceed thirty. Every girl who had attained the age of twelve might compel a young man to marry her, provided he had reached his fourteenth year, and she could prove he had anticipated the rights of a husband with her."

"Nearly a century ago, at Venice, the girls of pleasure received the protection of government. They belonged to the entertainments of the carnival which could not do well without them. Most of these unfortunate females were sold by their parents in their tender infancy: the agreement with the lovers or dealers in virginity was done before a notary public, and was considered valid in every court of justice. These nymphs observed most strictly their fasts, went daily to mass, and had their special tutelar saint, under whose auspices they exercised their profession with a good conscience. The courtesans had often the figure of the Virgin in their bedrooms, before whose face they drew a curtain previously to sleeping with their gallants. In the matrimonial market, matches were commonly made between persons who had never seen each other. Concubinage was a common custom, frequently ending, though, with marriage performed at the death-bed of one of the parties."

"In ancient Peru the marriageable young maidens, nearly or distantly related to the Inca, were given in marriage by him, the age being eighteen to twenty for the maidens, and twenty-four for the men. This occurred annually on a certain day, after which the ministers appointed by him for the purpose in the same manner mated the sons and daughters of the inhabitants of Cuzco. The governors of provinces were obliged to follow the same rule in their own districts; the heir to the crown married his own sister; in default of one, he married his nearest female blood-relation. Among the ancient Peruvians a man felt himself injured if his wife had been chaste; similar feeling is said to have existed in Thibet, and some of

the South Sea Islands. Women were freely offered to strangers by their husbands, fathers, or themselves among the natives of Brazil, Pegu, Siam, Cochin China, Cambodia, coast of Guinea, and most groups of Polynesia. Indeed, the inhabitants of the Pacific groups, separated from each other and from all the world, did not appear to have the least idea that chastity was a virtue, or its opposite a vice. If women were constant to one man, it was simply from inclination, and not from the force of opinion, custom or law. These usages still exist to some extent among the peoples mentioned in the foregoing."

"Among the Tartars, a century ago, a woman never saw her husband till she was just about to become his wife; girls went to their marriage just about as culprits nowadays go to the gallows. Often they fainted, and so greatly did they dread marriage, they would run out of the room when it was mentioned."

"The Zaporog Cassocks used to live in separate communities, the males in one place and the females in another. The women were not allowed under penalty of death to visit the residence of the men; but each Zaporog had a right to go to the settlement of the women, and select those he chose. No man gave himself any trouble to ascertain who was the father of the children that were born; boys were early taken to the settlements of the men, and the girls retained in those set apart for the women. The women had no freedom in the selection of men, but were obliged to submit to the embrace of any free Zaporog who might take a fancy to cohabit with her. Four men always lived in the same hut together. If a man fell in love with a girl, he was allowed to marry her; but he lost all right to share in the produce of the chase, and was obliged to till the land, and pay a certain tribute, which was divided among the Zaporogs of the settlement, who styled themselves free and noble."

"Among the ancient Mexicans, marriages were solemnized by the priests, and a public instrument was drawn up giving an inventory of the possessions of the wife, which, in case of separation, were returned to her. The hearth or fire was looked upon by these people with religious veneration, and considered as a mediator in all domestic disputes; it answered to the domestic gods of the Romans. At Tlascalla they shaved the heads of both bride and groom, to signify that in the married state they must put off all personal adornments. Divorces were very common, the only law being mutual consent."

"Perhaps the most remarkable instance in connection with the sale of women as wives was that of the Thracians, who put up their fairest virgins at public sale for the benefit of government, an important means of increasing the national revenue which has since been neglected."

"Among the Koreki, a people belonging to Russia in the seventeenth

century, those not given to a wandering life were remarkably free from jealousy. The settled Koreki, always when one man visited another, presented the wife or daughter for him to lie with; but those who led a wandering life were very jealous, and frequently put their wives to death if even suspected of infidelity."

"In the island of Mitylene there was, half a century ago, a small town about three days' journey from the capital, where every stranger, upon his arrival, was compelled to marry one of the women, even though his stay should be for a night only. If the stranger had property, he had his choice of several females, as to which one he should espouse, but a traveler of inferior rank was compelled to accept the lady offered him, no matter how ugly or plain. In any case the husband could depart the next morning. The wife of the night always felt herself under obligation to the stranger, for having delivered her from the reproach of virginity, which it was ignominious for her to retain, or to surrender to a native of the island."

"The early Christians, as is well known, were divided into as many sects perhaps as now. Among these, the Adamites, as they were called, a sect of the second century, who held that the merits of Christ restored them to a condition of Adamic innocence, appeared naked in their assemblies, and rejected marriage; they practised promiscuous intercourse, and held it as one of the surest means of salvation. This sect was twice revived, once in the twelfth century at Antwerp, and again in the fifteenth, among the Hussites, in Germany and Bohemia. The Gnostics and Manicheans, sects from the second to the sixth century, held the same tenets of promiscuous intercourse and rejection of marriage."

"In Wales, in some portions of Germany, and in our own country some fifty years ago, a custom of courtship was quite common, known by us by the name of Bundling or Tarrying; the lover generally came under the shadow of the night, and was taken without much reserve to the bed of his sweetheart. Here he breathed to her his tender passion, and told her how truly he loved her." It is questionable, however, if there were any more illegitimate births under that system of courtship than occur nowadays.

As is usually the case, many chips are wasted, and the writer has picked up the last one of any interest which has been saved, in searching for historical facts, upon which to base this chapter, entitled the History of Marriage. Those who are interested in these fragmentary narratives of customs will be entertained by perusing the next chapter, which will be found to contain the prevailing customs of to-day. Much of the chapter which follows, however, will be found to possess something more than items for the curious. It will pay for every one to give it a thoughtful and careful perusal.

CHAPTER IV.

MARRIAGE AS IT IS IN BARBARISM AND CIVILIZATION.

AS we have, in the perusal of the foregoing chapter, had our eyes turned so long to the past, we will rest them by looking a while at the customs of the present day. We shall find many of them as strange as those of past ages. What remains of barbarism have their queer usages, and those of civilization are not such as are best calculated to promote the happiness of the human family. If children in Christendom are not betrothed before they are born, they are generally fettered by parental dictation when they arrive at a marriageable age; and if girls are not *sold* by the public crier, as in ancient Assyria, they are by ambitious mothers, and often by themselves, to men who carry long purses. Mankind has not yet ceased to traffic in virginity, nor yet have men learned to respect the rights of those who differ from them but little in those qualities which distinguish the human from the brute creation. I will not, in the outset, however, enter extensively into deductions, but proceed to present facts. Let us first take a "bird's-eye view" of

Marriage in the Old World.

IN EGYPT, where, over five thousand years ago, the first step toward monogamy was made by the institution of the marriage of one man to one woman, but with a polygamic admixture of concubinage—polygamy, under the auspices of the Mohammedan religion, is now the rule. After marriage the women enjoy considerable freedom, but their abhorrence of those who do not hold to their religious faith, added to their fear of punishment, make them extremely faithful. Then, too, they are usually attended by a eunuch whenever they leave the harem. Emmeline Lott, recently writing from Egypt to an English newspaper, thus speaks of Egyptian women:—

"The Egyptian women generally pass their time in frivolities, except on certain days, when they attend to their *menage*, as I have already explained in 'The English Governess in Egypt,' in pleasing and wheedling their husbands, studying their gastronomic tastes, and satisfying their whims and

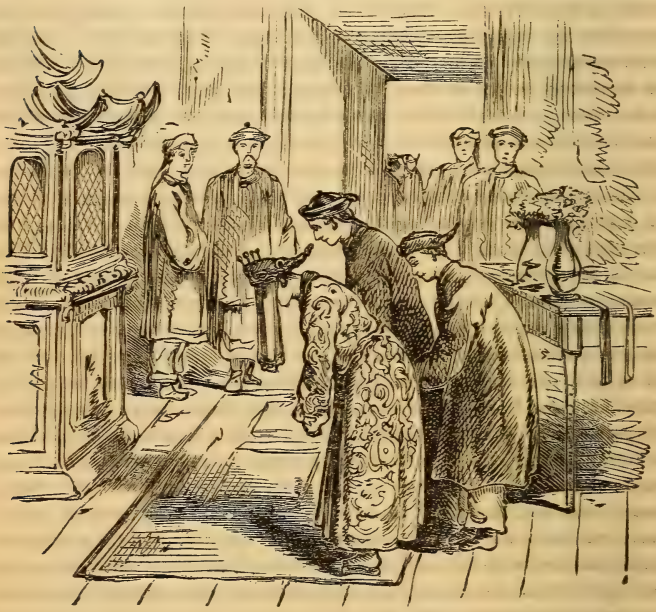
caprices. They delight in relating stories of themselves to their ladies of the harem, slaves, and eunuchs, congregated of an evening *en famille*, a kind of *conversazione*, or in listening to the songs of the almehs and their own slaves, having their horoscopes cast, and asking their mothers of the harem to interpret the dreams they have had during their *kef*, as Joseph did those of Pharaoh of old. The splendid halls of 'the mansion of bliss' of the great resound also with complaints. One woman murmurs at her barrenness another at the favor bestowed by her lord upon her *ikbal* for the time, which raises her jealous feelings to fever pitch. A question of engrossing interest is how they can obtain heirs. Their habitual conversation among themselves is disgusting beyond conception to European ears; but they have been trained up from childhood to converse in that manner, without having the slightest idea that by so doing they outrage the feelings of their sex; they do not think there is any harm in so doing, and all a European woman could say to them would not convince them to the contrary."

THE CHINESE are probably living under about the same marriage system established some four thousand five hundred years ago by Fu-hi, but it has undoubtedly undergone some modification. Those of the higher class, I am informed by a patient residing in Shanghai, are betrothed by the parents at three or four years of age, and although the marriage may not take place for twenty years, the parties are bound by the arrangement thus made by the parents. The betrothed children wear their hair differently from other children, so that they are known. The female of this class becomes the first wife of the one to whom she is betrothed; but the Chinaman is allowed as many wives as he can support, and these he has to purchase. These purchased wives are born slaves, and are wholly subject to the control of the first wife. It not unfrequently occurs, however, that some of the purchased wives are prettiest, and most loved by the husband. "Polygamy," remarks Norton, "is the custom in China, but the relations and the gradations between the wives are strongly marked. In the emperor's family, the first wife is the empress, and is attended by nine other wives, and they in turn are assisted by thirty-six of a lower grade, though they all bear the title of wives. Marriages among the lower classes are conducted by professional match-makers, usually old women, who are paid high sums for their management of such affairs. The intended bride and groom never see each other until their nuptials are prepared. Marriages are never made while either of the parties are in mourning. Widows are allowed to marry again, except in the case of the ladies of honor of the empress, who are expected to live in celibacy the remainder of their lives."

The wives who are bought are entirely at the mercy of their "liege lords," who can treat them as they please, and put them away on the forfeiture of the purchase-money. A celestial is forbidden to marry a person bearing

the same name as himself, a musician, or an actor of any kind, or a widow whose husband had distinguished himself, or one who has been convicted of any crime. The bamboo is the penalty attached to all violations of this law. Those in matrimony who cannot agree are allowed to separate. Divorces are also granted for the following causes: theft, a jealous temper, sterility, immorality, contempt of the husband's father or mother, propensity to slander, and habitual ill-health.

Fig. 158.



CHINESE MARRIAGE.

The marriage ceremony of the Chinese is fully described by a contributor to *Harper's Weekly*. "While staying in Shanghai," he says, "I was invited by the compradore of a mercantile hong to visit his house upon an occasion of this interesting nature. The bridegroom was a man of thirty-five, one of the agents of the firm at Hakodadi; the bride was twenty years of age, and daughter of a wealthy Shanghai native merchant. All the company wore their best dresses: long loose coats or pelisses of dark purple silk, lined with skins or embroidered, under which they had lighter gowns of

blue silk; their heads were covered with silk or velvet hats, topped with colored glass buttons and tassels. They sat at several little tables, six guests at each, and feasted on twenty-six different dishes. The bridegroom, who was distinguished by wearing a large necklace of crystal and green jade, assisted the host and other friends in serving the company. After dining, smoking, and drinking tea, they enjoyed a concert of music performed on shrill instruments. A salute of guns was fired and a few crackers let off in the court-yard and street outside. A gorgeously-decorated sedan-chair, or rather cage, was then sent to fetch the bride, who arrived at four o'clock in the afternoon. The dining-room, in which the ceremony was to take place, had been cleared and garnished; only two tables being left, on which were placed several large candlesticks, decked with paper flowers, and containing lighted candles; some joss-sticks were likewise set burning on the tables, in front of which a scarlet foot-cloth and cushions were laid upon which the wedded pair were to pledge their mutual vows. The company was by this time increased by the arrival of many ladies, wives of the male guests, handsomely attired in sky-blue silk pelisses, lined with ermine, and a profusion of jewelry, necklaces, bracelets, rings, with gold pins, and other ornaments in their hair; they had also their pretty tiny shoes. The chair in which the bride was carried having been borne into the room with a stately procession, the curtains around the chair were then drawn aside by the bride's nurse, who at once led her forth; a bird of the most gorgeous plumage, quite a bundle of embroidery, in scarlet, black, and gold, with a belt of pink silk and ivory round her waist, and her head crowned with a tiara of false jewels, and further decorated with crimson paper flowers upon a chignon, and with a crimson silk veil, two feet in length, entirely hiding her face. The bridegroom had meantime come in from an adjoining room, preceded by a master of the ceremonies, with a lighted candle in each hand. Standing near one of the tables, he took three burning joss-sticks in his hands, and responded to the questions put to him by a priest, bowing repeatedly at the shrine of the joss or idol, some pictures of whom hung on the walls. The bride, having been placed beside him, supported by the old nurse, who had a little scarlet flag in her hand, was similarly addressed, and made the proper responses. A green ribbon was then handed to the bridegroom, and a red one to the bride; these were knotted together, and the new husband, amidst a flourish of music, led off his new wife to their nuptial chamber. Here several of their family and friends, including two older wives of the same man, awaited them, ranged on each side of the bedstead, to pronounce the prescribed benedictions, and to bestow a quantity of ground seed and nuts, of different sorts mixed together, which they did not eat, but had sprinkled over them. After a little time the newly-married couple returned into the dining-room and sat down to a sumptuous repast.

The old nurse first carefully tasted every article of food, to see whether it was fit for her young lady to eat. A baby, two or three months old, was then brought and placed on the bride's lap, to test her love for children. The bride and bridegroom were afterward formally introduced, in their new character, to every one of their respective friends and relatives on each side, the names being proclaimed by a herald or usher. This lasted an hour or more, but the gentleman and lady were at last permitted to retire. Large bowls of oil, with floating wicks alight, had been placed around the marriage-bed, as a votive sacrifice to the deity on their behalf. The bride's trousseau, filling ten huge boxes or trunks, was deposited in one corner of the room. After three days' seclusion, the newly-wedded pair began to receive visits of social congratulation."

THE JAPANESE, "as a general thing," remarks Picart, "have but one wife, but they can put her away on the smallest provocation. The wives of princes and noblemen, who are permitted to have a number, are kept secluded in harems, but much less rigorously than among the Mohammedans. Like the Chinese and other Eastern nations, they betroth their children when very young, being careful to avoid any disparity in their ages; they never receive any dower or gifts with their wives, but return to the parents all belonging to them, that their wives may not have the slightest reason for being wanting in respect toward their lords and masters. The marriage ceremonies are in many respects like those of the ancient Greeks and Romans, the use of torches, nuts, fruits, and leaves, to signify virility and fruitfulness, is common among them. The Chinese and Japanese are very similar in their ceremonies and rites of marriage, as well as in the laws and customs that govern them, and indeed the whole Mongolian and Tartar races follow these laws, customs, and ceremonies to a great degree."

A recent traveler informs us that while they are allowed one legal wife, they may have as many others as their means will permit. The law regulates the matter in this way. When a girl's relatives are too poor to support her, she may become the member of a plural household, instead of a beggar, but the legal wife adopts all the children. It is, therefore, a wise Japanese who knows his own mother! The nominal emperor has twelve legal wives, and as many other ones as he chooses. As soon as married, the wife of a Japanese is compelled by the custom of the country to shave off her eyebrows, and dye her teeth entirely black with a preparation of urine, filings of iron, and saka. A gentleman who has seen the Japanese in their country, says, the married women, at a distance of two hundred yards, look as if they wore black patches over their mouths, their teeth are so black and prominent. This ugly stain upon the teeth is made still more conspicuous when they make their toilet on an extra occasion, for then they paint their face and neck white, and color their lips with a preparation

which changes the natural hue to a rich vermilion. Married women are said to be true to their husbands, but the latter take no pains to return the compliment. The law defends the husband who kills the seducer of his wife, provided he also kills the faithless wife; not otherwise. He must not slay one without killing the other. If a man finds he cannot have children by his first wife, he invariably marries or purchases another; but the first is the acknowledged mother of the offspring which may result therefrom. The women do not suffer much in having children, and the general health of the people is good; they also appear tolerably happy. The politeness of the Japanese exceeds that of the French.

As Japan, with a population of 38,000,000, has, until comparatively a recent period, been a locked nation, with the key inside, something of the religious and social, as well as marriage customs of that country, will be interesting to the reader. Its civilization is entirely unlike ours. A gentleman who has been among them informs me that the priests go to one temple, mumble over something, and then pass on to the next. There are places in the temples for the people to put in rice and other things for the gods to eat. Their religion, particularly among the women, is more general than the Christian religion is among our people. Tradesmen, if they have not had good luck one day, put up tapers in their rooms for good luck on the next. Their gods have little bells to them, which the people jingle when they begin worship. The bells are to waken up the gods. The Japanese at the beginning of the year pay off all their debts, and if necessary to enable them to do so, they sell their daughters to prostitution for

Fig. 159.

A JAPANESE OFFICER, WIFE, AND CHILD.

one or more years, or hire them out for the same purpose. A man can buy a Japanese girl out and out, as long as he wants her, for $200. Some of these girls who are sold in this way are very well educated. If sold for a few years only, they return again to their parents at the expiration of the period, and frequently marry. To be sold or hired out this way is not considered a disgrace, and they are as much respected afterward as before. The women are more passionate than the same class in China. At fifteen years of age the girls go to a custom-house to get a license before they can be hired out. The license costs about two or three cents.

Prostitution in Japan is regularly licensed by the government, and the houses occupied for the purpose often cover large blocks in the cities. Licensing these places, however, is not so cruel, or so incompatible with morality there as in Christian nations, because the inmates are not disgraced by their vocation. In the caste to which they belong they are entirely respectable, and are not regarded with less esteem by the higher castes in consequence of their sexual practices. They may leave at any time and contract honorable marriage. The consequence of this treatment is an avocation which in Christian cities renders its votaries dissipated, irreligious, and abandoned, has little effect upon the moral and religious character of Japanese women who are disposed to pursue it; but in physical health, they, too, must become victims more or less to those diseases which are contracted or generated by excessive and promiscuous cohabitation where passion or affection is absent. It is said, however, that they are comparatively healthy, and if so, it is undoubtedly mainly due to their habits of frequent bathing. Personal uncleanliness does not appear to constitute one of their vices. This fact would naturally do much to limit the production and dissemination of venereal disorders, usually so common in the dens of harlotry.

"Bathing-houses," remarks a writer, "are among the institutions of Japan, but their regulations are very peculiar. Looking into one, we saw a platform about two feet above the floor, on which stood a number of adults of both sexes, and also several children, washing themselves, and romping about in a state of entire nudity. People were passing in and out all the time, and several women with children in their arms were chatting with the bathers in the most unconcerned manner. As we looked in, our strange countenances attracted attention for a moment, and then the bathers resumed their ablutions with a pleasant air of nonchalance." "Among the humbler population of Japan," remarks another writer, "the birth of female children is not regarded as a misfortune, as in China—a misgo to be averted by infanticide. Here sufficient avenues for employment are not wanting. Besides the light labors of the farm and loom, the picking of tea, the culture of silk-worms, there is em-

ployment in many light manufactures, in the shops as assistants, saleswomen, keepers of the accounts, keepers of the purse for more indolent or unoccupied, or possibly more submissive husbands. Let our social reformers take heart that this is in conservative Japan, a place shut up and sealed up for three centuries from the benign influences of accidental civilization!"

Fig. 160.

A JAPANESE GIRL OF HUMBLE RANK.

"The farmers as a class," continues the same writer, "hold an intermediate rank in the social scale. Of all whose position is not hereditary, they hold the best place. It is from their ranks that the government infuses new strength into the soldier caste, and the grades of civil service are possible to conspicuous and well-sustained merit. And in a land like this, where family alliances are the touchstone of caste, it is no *mésalliance* for a noble to wed the daughter of the great landholder, and the proudest chief in the land lifts to his side as concubine the farmer's daughter, by whose charms of person he has been captivated, and whose offspring may inherit all his rank and privileges. She may not be his wife, but she may be his 'side-wife,' as her title indicates, and may, as in patriarchal days, be his best beloved, and the mother of his heirs. For though other things being equal, the son of the real wife has precedence by custom, there is nothing to prevent the course of descent being directed, when interest, or love, or pride, or natural incapacity or unfitness in the wife's children intervenes, to the children of the side-wife, or even to an adopted son."

In Asiatic Russia, the Calmuck Tartar seizes the woman of his choice,

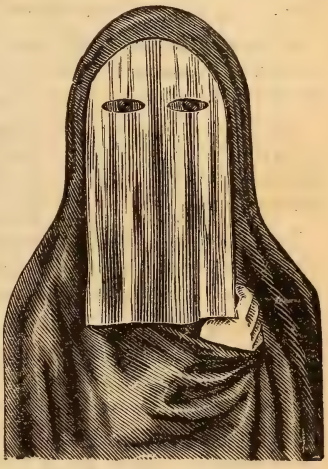
carries her off on horseback, and if successful in keeping her over night, she becomes his wife. The Tungoose Tartars try races on horseback for their wives. The lady has a good start, and if her pursuer overtakes her, she must become his wife. The ladies are distinguished for their equestrian accomplishments, and are seldom caught unless they desire to be. "Among the Crim Tartars," remarks Goodrich, "courtship and marriage are encumbered with ceremonies. The parties seldom see each other till the ceremony, and the contract is made with the heads of the tribe. At the period of the wedding, the villagers near are feasted for several days. The bride is bound to show every symptom of reluctance. There is a contest between the matrons and girls for her possession. The priest asks the bride if she consents, and on the affirmative, blesses the couple in the name of the prophet, and retires. There is great ceremony and cavalcade when the bride is carried to her future home. She is conveyed in a close carriage, under the care of her brothers, while the bridegroom takes an humble station in the procession, dressed in his worst apparel, and badly mounted. A fine horse is led for him by a friend, who receives from the mother of the bride a present of value, as a shawl."

Among the Siberians, of one tribe, it is said "the wife pulls off her husband's boots, as a sign of her obedience." In another, "the bride's father presents the bridegroom with a whip, with which he is instructed to discipline her as often as he finds occasion." In another, "the bride is carried on a mat at night to the bridegroom, with the exclamation 'There, wolf, take thy lamb!'"

In Persia, according to the New American Cyclopedia, "there are two kinds of marriages: those which are permanent and respectable, and in which the husband is restricted to four wives; and another kind, called seegha, in which a contract of marriage is made for a limited period never exceeding ninety years." This is a reasonable limit! "The latter species of marriage may be contracted with an indefinite number of women, who are generally, however, of an inferior rank, and perform menial services for the proper wives. The children of both classes are regarded as perfectly equal in station and legitimacy. Among the great mass of the people, a man has rarely more than one wife, and the condition of the women seems to be easy and comfortable. The ladies of the upper class lead an idle, luxurious, monotonous life. Contrary to the common opinion in Christendom, they enjoy abundant liberty, more, perhaps, than the same class in Europe; the complete envelopment of the face and person disguises them effectually from the nearest relatives, and destroying, when convenient, all distinction of rank gives unrestrained freedom. Much of their time is spent in the public bath-house, and in visits to their friends. Women of the higher class frequently

acquire a knowledge of reading and writing, and become familiar with the works of the chief Persian poets. These, however, are the best aspects of female life in Persia. On the other hand, it is certain that in the anderoons, or harems of the rich, there is often much cruelty and suffering, and the greatest crimes are perpetrated with impunity. There is nothing to check the severity of an ill-tempered or vicious husband; though sometimes an ill-treated slave or wife redresses and terminates her wrong by administering a dose of poison."

Fig. 161.



A PERSIAN LADY:
Or so much of her as we are permitted to see! What pretty eyes! What voluptuous lips! What rosy cheeks! Isn't she beautiful?

Picart remarks that the priests in Persia "can have but one wife, unless she proves barren, when they can put her away and take others, until they find one more fruitful." Notwithstanding the Persians share the oriental idea that women were created for the main purpose of reproduction, according to the author last quoted, they strangely enough consider child-birth to carry with it pollution; lying-in women are obliged to be purified, and also kept at a distance from their friends and neighbors." The early Christians, sharing this idea to some extent, used to call in the priests after the birth of a child, who carried on some ceremony over the bed of the mother, which was supposed to absolve her from all uncleanliness.

In the Island of Formosa, as related in Alexander's History of Woman. "daughters are more regarded than sons, because as soon as a woman is married, contrary to the custom of other countries, she brings her husband home with her to her father's house, and he becomes one of the family, so that parents derive aid and family strength from the marriage of a daughter; whereas sons, on their marriage, leave the family forever." The Formosans, in company with the inhabitants of most of the Indian Islands, are, according to Picart, practically polygamists, and leave their wives whenever it suits their inclination. "The fact is," says this writer, "the whole system of marriage among the island nations resolves itself into a species of concubinage, governed by certain rites and ceremonies, having no special legal or religious character."

In the Island of Java, we are told, by Lady Hamilton, "when any one of the emperor's wives commits infidelity, she is punished with death. Thirteen of these unfortunate creatures were executed in one day for this crime; they were tied to posts, and poisoned with the *upas*."

At Pegu, according to the same writer, "parents sell their daughters to strangers for a longer or shorter period, at will. The king of Pegu has but one wife, though he has a large army of concubines.

The Druses, remarks Lady Hamilton, "are the most jealous people in the world, being so much so that no one dares to ask another after the health of his wife and family, for fear of causing their death at the hands of the infuriated husband and father."

In the Birman Empire polygamy is prohibited, but a man may have as many concubines as he can comfortably support. Wives are sold into concubinage or prostitution on actions of debt, if the husband has not the means to liquidate.

In Hindostan marriage takes place at eleven, or as soon after as the parties arrive at puberty, the arrangements for which are usually conducted by the parents, who, on the bride's side, expect and generally receive expensive presents as payment for the wife furnished. A father or guardian cannot dispose of a younger daughter in marriage before the elder. When the husband is absent, it is expected of the wife that she will appear mournful, dress herself in the plainest clothing, eat plain food, and keep away from the window of her apartment; she must indeed appear sorrowful and wretched. "The Hindoos," says Lady Hamilton, "allow polygamy only to the Brahmins. The women venerate marriage, believing that those that die virgins are excluded from the joys of paradise." (This is discouraging to old maids, if true!) "As is well known, the Hindoo women love and respect their husbands, and at their death willingly immolate themselves on the funeral pyre. They begin to bear children at twelve, and as this duty is considered the only important one of the wife, they have them in large numbers." In the west of Hindostan, on the coast of Malabar, women are allowed a plurality of husbands. A traveler remarks that "they are a martial people, and possess a great deal of the spirit of knight-errantry, insomuch that their tournaments frequently end in blood. The husbands are not exactly tenants in common in regard to her favors. Each enjoys her attentions exclusively at appointed periods, according to her inclinations, and no one is allowed to enter her apartments while the arms of a co-partner in domestic affairs are over the door. She resides at the domicile of her friends, and, when she becomes a mother, nominates a father in each case, and he is bound to maintain the child."

A writer in the *Literary Album* tells us of a curious people called the

"Todas," who live upon a range of mountains, called in English vernacular, Blue Mountains, in the southern part of the empire of Hindostan. "One of the worst traits in their character," remarks this writer, "is their destruction of most of their female children, and the barbarous manner in which it is effected. The infant is placed within the buffalo camp, and is then trampled to death by the animals which are driven in. The natural consequences which result from this are a scarcity of the female sex, and the institution of polyandry among them. Each woman is permitted to have as many as seven husbands, who are mostly brothers, when the case will permit of it. It is said that no jealousy or ill-feeling arises from this singular custom." It appears from the further narrative of this writer, that the Todas have their prejudices growing out of caste. There are the aristocrats, the middling kind of people, and the common people, and a Toda belonging to one class cannot marry a Toda belonging to another class. So it is seen that they are even with us in some respects. It is pleasant to know that in this one particular we are not inferior to barbarians!

In Thibet, remarks a writer, "one woman becomes the wife of a whole family of brothers; and this custom prevails in all classes of society. The oldest brother chooses the bride and consummates the family marriage. Travelers relate instances of five or six brothers living under one roof, in this manner, in great harmony." The women are active and industrious, and are said to "enjoy a higher consideration than in other oriental countries."

In Abyssinia a kind of free-love system prevails. "Mutual consent," remarks Lady Hamilton, "is one form of marriage among them, and this dissoluble at pleasure. They cohabit together when they please, and annul or renew the contract in the same manner. Thus a woman or man of the first quality may be in company with a dozen who have been their bridegroom or bride, though perhaps none of them may be so at present. Upon separation, they divide the children. The eldest son falls to the mother's choice, and the eldest daughter to the father. There is no distinction, from the prince to the beggar, of illegitimate or legitimate children."

In the Barbary States marriage negotiations are conducted entirely by parents, the candidates for matrimony not seeing each other, in many cases, before the bargain has been agreed upon. The marriage is attended with rejoicing, and the "bride is carried home in a cage, placed on a mule, attended with music. Divorce is easy for both parties, and the wife can dissolve the contract if her husband curses her more than twice. For the first curse he must pay her eighty ducats, and for the second a rich dress. A man may have four wives, and as many concubines as he chooses. The Jews in Barbary are numerous and much oppressed. The house of a Jew,

and all its sacred relations, is open to every Moor who chooses to violate it." The Moors sell their daughters in marriage, and the whole negotiation is conducted by the parents, without respect to the wishes of those most interested.

In Central Africa polygamy is universal. Mr. Bowen, the Baptist missionary there, gives the following account of their customs: "Kings, nobles,

Fig. 162.

A CENTRAL AFRICAN.

and rich men have large numbers of wives, and even the common people have two or three. No woman, therefore, pretty or ugly, is prevented from being married.

"Courtship is carried on by female relatives, and either sex has the right

to propose. Betrothment is sealed by the payment of forty dollars, or thereabouts, by the expecting husband to the mother of the girl. Conventional modesty forbids her to speak to him or to see him, if it can be avoided. Men have the pleasure of divorcing their wives; they labor for and support themselves, having no claim on their husband's property. If divorced for adultery, she or her relatives are obliged to pay the dowry settled on her. During the marriage the woman has exclusive right to her earnings, and is sole owner of her property.

"When the man dies, the eldest son inherits the house and all the wives, except his own mother. Yoruba women are not prolific, and barrenness is not uncommon, but is a disgrace."

Among the Krue people, according to the African "Repository," "the price of a wife is usually three cows, a goat, a sheep, and a few articles of crockery-ware, or brass rods, the whole of which would scarcely exceed twenty dollars. The woman is always bargained away for life, and at the decease of her husband passes to his brother or some other connection, being deemed transferable property. If, however, she is ill-treated, she may return to her family; though to guard against this provision being abused, they are required to restore twice as much as they received for her. Each woman is the mistress of her own household, and is not liable to be interfered with by any of her co-wives."

In Western Africa the marriage customs are equally peculiar. The king of Ashantee has three thousand three hundred and thirty-three wives, only a few hundred of whom are attached to the palace. When the wives of the king go out, they are escorted by an army of boys with whips, who cudgel everybody they see in the streets, lest some one should happen to get a glimpse of the ladies. The Mohammedans generally have four wives while the non-professors frequently have a great number. It is against the law to praise another man's wife! "Conjugal disputes," says Goodrich, "are sometimes settled by the interference of *Mumbo Jumbo*, a mysterious personage, who seems to be in the interest of the husband. His interposition is decisive. He is an incarnate bugbear, dressed in the barks of trees, and sometimes surmised to be the husband himself. Mumbo Jumbo comes at evening, and goes to the *Bentang* tree, where the whole village assembles, though the females are the least pleased, for no one knows to whom the visit is intended. At about midnight Mumbo fixes upon the offender, who is stripped, tied to a tree, and scourged." "The latest accounts of Livingston, Du Chaillu, and Barth," says Norton, "show that among the nations of Western and Central Africa, the wives are treated as beasts of burden rather than as human beings."

In Sierra Leone, an English colony, established in the latter part of the

eighteenth century, for the purpose of suppressing the slave trade in Western Africa, there is, according to Norton, "in each of the cities a kind of boarding-school or monastery for young ladies, where they are educated for matrimony during one year, after arriving at a marriageable age. They are then taken to the market-place and inspected by the young men to the sound of Moorish music. Here they are selected according to the tastes, and become wives before nightfall."

In Congo, continues the same writer, "the negroes take their wives for a year on trial; if they are not then satisfied with them, they return them to their homes. The missionaries have tried in vain to break down this custom, but the natives insist that it is not right to risk the happiness of their daughters in an indissoluble union, with persons with whose habits and tempers they are not acquainted." There is some sense in this, even though it be an idea emanating from the brain of a Congo negro. A doting and fond mother in our civilization, when she commits her daughter to the hands of the one who becomes her husband, experiences very much the same sorrow that she does when she commits her to the tomb. With all the festivity usual upon a wedding-day, there may almost always be found two anxious hearts, if the parents are living spectators. A mother of strong affections generally watches with many misgivings her daughter, as she approaches the marriageable age; and it is no uncommon thing to hear her give expression to her solicitude, as to the future happiness of her child, and her wish that her daughter had not reached the age which constitutes her a candidate for matrimony.

Among the Caffres, of Southern Africa, Norton informs us, "weddings are celebrated after the consent of the parents and the girl, there being no marriage ceremony. If the girl looks coldly on her lover, he wins her by force of arms, fighting all his rivals *seriatim* until he has fought himself into her affections."

In Poland, "the women of middling condition," remarks Alexander, "are not allowed to marry until they have wrought with their own hands three baskets full of clothes, which they are obliged to present to the guests who attend them on their wedding-day." In our large cities this custom differs somewhat. About three baskets full of clothes are manufactured for the bride, and piled upon her like so many layers of onions, for her personal adornment at the marriage ceremony.

In Lapland, "the right of possession of a girl as a wife," remarks a writer, "is decided by a race, in which the girl has the advantage of a start of one-third of the distance. If the young man distances her she becomes his bride; but if she win the race he can never more apply for her."

In New Holland, two of the front teeth of the female are knocked out

before she is given to her lover. On her presentation, the latter throws a kangaroo skin over her shoulders, spits in her face, paints her with stripes of various colors, compels her to carry his bag of provisions to his hut. If she goes too slow to suit his liege lordship, he gives her a few kicks.

In the more civilized portions of the old world are found both the monogamic and polygamic systems of marriage, and in the *customs* of the people the latter prevails to a greater extent than is guaranteed by their laws.

In England, the monogamic system of marriage, as in our own country, is professedly established by law, but public opinion tacitly sustains polygamy for husbands, as may be reasonably inferred from her new divorce law, which denies the wife a decree of divorce for adultery (unless incestuous) on the part of the husband, but entitles the husband to such a decree for any adulterous acts on the part of the wife.

"*The grounds of the dissolution of marriage are, on the part of the wife, simple adultery; but on the part of the husband, the adultery must be incestuous (that is, adultery with any woman, whom, if his wife were dead, he could not lawfully marry, by reason of her being within the prohibited degrees of consanguinity or affinity) or accompanied with bigamy, whether this bigamy occurred within or without the British dominions*, or accompanied by cruelty such as would by itself entitle the wife to a judicial separation or by desertion, without reasonable excuse, for two years and upward. Rape, and the crime against nature committed by the husband, are also grounds upon which the wife can obtain a divorce. But the court must be satisfied not only of the fact of the adultery alleged, but also that the petitioner was not accessory to it, nor connived at it, nor has condoned, that is, pardoned it, and also that there is no collusion between the parties—in any of which cases, the petition is to be dismissed; nor is the court bound to pronounce a decree of divorce if it should be made to appear that the other party had also been guilty of adultery, or of unreasonable delay in presenting and prosecuting the petition, or of cruelty toward the other party, or of desertion without reasonable excuse, or of such willful neglect or misconduct as has conduced to the adultery.

Fig. 163.

THE ENGLISH GIRL.

"The court has the power in all cases, according to its discretion, to

grant alimony to the wife, either by way of a round sum or an annual payment during her life, and to make interim orders, by way of alimony or otherwise. The latter power also extends to the judges authorized to grant judicial separations.

"If the husband is the petitioner, he must make the alleged adulterer a co-respondent, unless excused from it by the court. If the wife is the petitioner, it is in the discretion of the court to require that the woman with whom the adultery is alleged should also be made a co-respondent. If the adultery is established, the court is authorized to impose the whole or a part of the costs of the proceeding upon the adulterer. Either of the parties is entitled to insist on a trial by jury. The petitioner is liable to be examined under oath, at the discretion of the court, but is not bound to answer any question tending to show that he or she has been guilty of adultery.

"The husband, either in connection with a petition for a judicial separation, or a divorce, or by a distinct process, may claim damages against an adulterer, which damages, if recovered, shall be applied, at the discretion of the court, for the benefit of the children of the marriage, if any, or as a provision for the maintenance of the wife."

The foregoing is a condensation of the new law, as given by one of our daily journals. Although a decided improvement on its predecessor, it lacks the liberality which the spirit of the age demands, and indicates most strikingly the prerogative married men arrogate to themselves. It also exhibits a curious kind of sexual morality, when it renders the petitioner for divorce liable to examination under oath, with the understanding that he or she need not answer any question tending to show that the petitioner had been guilty of adultery. An adulteress's husband may obtain divorce from her, if he can prove that she is guilty of adultery, notwithstanding his own conduct may have been at variance with what he requires of his wife. During the discussion of the new bill, one of the members of Parliament in substance remarked, that if the law should be made equally binding on the husband, every gentleman in the house might be legally deprived of his wife!

Marriages among the higher classes of English are governed by considerations of wealth and title, with little reference to love. The marriage of an aristocrat with a person in humble life cannot be tolerated. All sorts of incongruous companionships are therefore formed in high circles. "Especially have English princesses," remarks a writer, "been unlucky in their matrimonial connections. More particularly is this true of princesses of the house of Hanover. To go back to Sophia, daughter of George the First, who married the first William Frederick of Prussia, she, poor thing, was almost daily beaten by her husband, a man whose brutality amounted almost to insanity. Once she was nearly killed by him, with her daughter, and

often was in imminent fear of her life. He denied her sometimes the common necessaries of life. She used to say, sarcastically, in her old age, that the only kind words he ever addressed to her were, 'Sophia, get up and see me die.'

"The eldest daughter of George the Second made a match only less unhappy. She was twenty-four before she was married at all; and then had to take the deformed Prince of Orange, because he was the only Protestant prince in Europe of suitable age. Her father expostulated with her on the malformation of her proposed bridegroom. 'Were he a Dutch baboon,' she answered, tired out with her position at home, 'I would marry him.' It was the custom of that coarse age for a bride and groom, on the nuptial evening, to sit up in bed, in costly night-dresses, to receive the compliments of their friends. On this occasion, as the royal family and nobility defiled past the prince and princess, who were magnificent in lace and silver, the queen, the bride's own mother, declared that when she looked at the bridegroom from behind, he seemed to have no head, and when she looked at him in front, she could not, for the life of her, tell where his legs were. Walpole or Henry, we forget which, records the anecdote. The princess lived to regret her maiden condition at her father's court, even with all the neglect that attended it.

Fig. 164.

VICTORIA.

"Another daughter of George the Second married the Landgrave of Hesse, the same who afterward sold his soldiers to England, in order to assist in conquering these colonies. He was so brutal, that his wife, at last, had to desert him and seek refuge in her native country. A third married

the king of Denmark, who abused her shamefully, openly insulting her in the presence of an unprincipled woman, who shared what he had of affection. She died, partly of a broken heart, partly of a cruel disease, at the early age of twenty-seven."

The undercurrent of English married life jets out a little in one of Thackeray's novels, where he asks: "Who dared first to say that marriages are made in heaven? We know that there are not only blunders, but roguery in the marriage office. Do not mistakes occur every day, and are not the wrong people coupled? Had heaven any thing to do with the bargain by which young Miss Blushrose was sold to old Mr. Hoarfrost? Did heaven order young Miss Fripper to throw over poor Tom Spooner, and marry the wealthy Mr. Bung? You may as well say that horses are sold in heaven, which, as you know, are groomed, are doctored, are chanted on to the market, and warranted by dexterous horse-venders as possessing every quality of blood, pace, temper, and age. Against these Mr. Greenhorn has his remedy sometimes; but against a mother who sells you a warranted daughter, what remedy is there? You have been jockeyed by false representations into bidding for the Cecilia, and the animal is yours for life. She shys, kicks, stumbles, has an infernal temper, is a crib-biter—and she was warranted to you by her mother as the most perfect, good-tempered creature, whom the most timid could manage! You have bought her. She is yours. Heaven bless you! Take her home, and be miserable for the rest of your days. You have no redress. You have done the deed. Marriages were made in heaven, you know; and in yours, you were as much sold as Moses Primrose was when he bought the gross of green spectacles."

Among the lower classes more freedom is allowed by the social rules by which they are governed, but still the glitter of gold is frequently more captivating than the throbbings of a good heart, among these. Many a marriage is consummated where a purse is held by one or the other, which would hardly be contemplated in its absence.

Marriages in England, to be legal, must be solemnized by a clergyman of the established church, after the banns have been published or a license obtained from the primate.

The marriage laws of Ireland correspond in all essential particulars with those of England. In Scotland, however, there is less difficulty in "getting spliced," a simple declaration of the parties before a competent witness being sufficient to make the "twain one flesh." As in some of the States in this country, it is no trick to get the knot tied, but a mighty difficult one to get it untied. Gretna Green, located near the border of England, was famous at one time as a marrying place, and was resorted to extensively by English fugitives, who found a blacksmith ready to listen to all such declarations for a small fee.

In Spain little fidelity is known among married people. Jealousy never finds place in the Spanish breast, and the "liberty of married women has no limit except their own discretion," which, owing to an ardent temperament, interposes but a feeble restraint. Marriages are generally arranged by the friends or parents of the parties, and solemnized by the priests, whose powers in that country are despotic. Lord Byron, in describing the customs of the Spaniards, in a letter to his mother, from Cadiz, wrote as follows:—

"I beg leave to observe that intrigue here is the business of life; when a woman marries she throws off all restraint, but I believe their conduct is chaste enough before. If you make a proposal which in England would bring a box on the ear from the meekest of virgins, to a Spanish girl, she thanks you for the honor you intend her, and replies, 'Wait till I am married, and I shall be too happy.' This is literally and strictly true.

"The Spanish lady may have her cortejo as well as the Italian her cicisbeo. It is Spanish etiquette for gentlemen to make love to every woman with whom they have the opportunity, and a Spanish lady of rank has said that she would heartily despise the man who, having a proper opportunity, did not strenuously solicit every favor she could grant. Every Spanish woman reckons this as a tribute due to her charms; and, though she may be far from granting all the favors a man can ask, she is not the less affronted if he does not ask them." Yet the husbands of Spanish ladies, like those in all other countries, are under still less restraint than their wives.

It was once a custom in Barcelona, Spain, to lead out of the foundling hospital in procession all marriageable girls brought up in it, and as the procession passed, the masculine bystanders in search of wives indicated their selections by throwing a handkerchief at the object of their choice.

In France, marriages among the higher classes are arranged by the parents or relatives of the parties, and generally solemnized by the priests. Separations are more common than divorces, "agreeing to disagree" being settled upon by the parties themselves. "The boudoir," remarks Goodrich, "is the sanctuary of a married dame, and the husband who should enter it unbidden would regard his power more than his character; he would bear the reproach of society, and be deemed a brute; for it is a great evil in French society that the unmarried females have too little freedom, and the married quite too much. The boudoir is a fit retreat for the Graces, and other females of the mythology. Paintings, statues, vases, and flowers, nature and art, combine to adorn it. It is the palace Armida, the bower of Calypso; but it breathes of Helicon less than of Paphos." Professional engagements having, at least thus far, prevented me from going abroad to look around with my own eyes, and desiring to know something of Parisian

society, I addressed a letter of inquiry to a personal friend—an intelligent and gifted young woman, at this writing a resident of Paris—who favored me with an interesting response.

"In the first place," remarks my correspondent, "woman is not very much esteemed in Paris. That clever Frenchwoman, Madame Audouard, says that women exist for the Frenchmen only while they are young and pretty. A woman is *loved*, but not esteemed, and almost never spoken of as an intelligent creature. All this is the result of the system of education of the young girls. Not to seem to judge too harshly, I find that the young girl of Paris, with the well-to-do and aristocratic classes, after subtracting from her her *dot* (dower), is a woman more or less innocent, but *helpless*, and almost a *nonentity*. The system pursued which accomplishes this result, as near as I can gather, is to keep her as dependent as possible, the parents dictating the minutest details of her life. Neither familiar conversation or general reading give her the slightest hint of those subjects that *am!* She is scarcely ever permitted to be alone, never to go into society, to walk or to receive company alone. There are mothers willing to vouch to any gentlemen willing to take their daughters off their hands, that they have never been in the society of man one moment without the presence of their mothers, or some other person competent to take charge of them. This, of course, is a highly satisfactory guaranty for the past, but, in my opinion, a worse than no guaranty for the future. Young girls must not read *Molière*, who is moral as far as plot is concerned, but sometimes free in language, like our Shakespeare. Neither must they read the journals, which, it is true, are sometimes quite beyond the stretch of decency. The young girls employ themselves in various little feminine arts, and read a literature written expressly for them.

"When mademoiselle, with her *dot* (dower), is married, this unnatural pressure is removed, and the more or less ignorant girl has her liberty at a single stroke. Timid natures cling to their families, and are still the child. Instances are very common here where the young wife prefers her mother's home, and it is with difficulty that the husband can keep her with him. It is the other sort of natures that rush into dissipation, and if they are a little or very wild, society does not turn its back upon them.

"I have heard it said here that any man can kiss a French girl the second time he meets her. This must depend upon individual character; if she is inexperienced some people would call it a weakness, others a fault. In America one might have a worse misfortune befall them than *to be kissed;* not exactly the same here, though, where Frenchmen, to state it very mildly, are rather impetuous. Having by caprice a poetical, but never a practical respect for women, they consider the least favor a *carte blanche* for many more. For instance, if a young girl gazes around at a ball or

theatre, as many American girls do, she is pretty sure to receive a challenge.

Fig. 165.

EUGENIE.

"The conversation with married women is very much more free than with us. In common table-talk it is considered nothing to remark that such a lady is *enciente*—that such an animal or individual is in *chaleur*. Many

things that certainly are natural, but which our taste forbids, are spoken of by their real names, and with perfect coolness. This freedom of conversation is carried into the other details of life. Married women may go out with other men if they choose, and are often excessively independent of the husband. In cases where the wife is untrue, it depends on circumstances and the character of the husband, whether he make a fuss or not. If not chaste in his own habits, he generally takes it easy." After giving some notable instances illustrating the truth of the last remark, which I omit on account of the names of the distinguished individuals being given, my correspondent continues: "The courts do not punish a man who shoots his wife's lover. But, if taken in the act, both man and woman may be punished; but this latter case occurs almost never.

"Divorce, to all practical purposes, does not exist in France. It was introduced by Napoleon I. when he wanted to get rid of Josephine. Separation *du corps*, without the right to marry again, is frequently obtained, but with great difficulty. The only causes that I have been able to find out, that the court will admit, are—when the husband at marriage has concealed from his wife that he is subject to epilepsy, or that he has been in the galleys. Adultery is not a sufficient cause. If in this I am misinformed, any of our law-books will correct my statements, as they contain an account of the laws of divorce of all nations. In nearly all cases the law favors (in France) the man. No married woman holds property in her own right, without a special contract before marriage; and if she inherits property, unless when legally separated from her husband, the latter is the heir, or rather guardian, until all the children are of age.

"I think old maids are about as free and enjoy the same social privileges as married women; and if they happen to possess wealth, are very much respected. On the floor below our apartments lives a count, who is an old bachelor, with Mademoiselle ——, who is an old maid; both are old, rich, respectable, etc. The expenses of servants, carriage, garden, etc., are shared equally between them. They have lived thus for many years, and no one seems to think or speak evil of them. I do not think a respectable old maid would thus dare to brave American public opinion.

"As for the unfortunate girls of Paris (*les filles de joie*), with which the streets swarm, they die mostly in misery, of ill-health and poverty; sometimes in the hospital; sometimes—nobody knows where. There is, near the Seine, a bureau of examination, from which the sick girls are sent to a hospital until cured, or else they are forbidden to exercise their profession The principal causes of prostitution are the difficulty of obtaining work; the actual expenses of the simplest living; sometimes simply a lax morality; but oftenest a passionate love of luxury, which seems to pervade the whole city. Of single girls who become mothers, there seems to

be a general disposition to help them up. They are not regarded as unpardonable sinners; and the illegitimate children are not excluded from society. There is an institution in Paris, '*Des Enfants Trouvés*,' designed for the reception and support of illegitimate children. To this place come poor women unable to support their offspring, or rich women too proud to own their fault. Into a little box or car, running on a little railroad, is deposited the infant, which enters the institution without the slightest clew to the person who placed it there. In many cases where the mother intends to reclaim her child, she attaches a name, necklace, or some mark, which is preserved by the institution. I think a good motto to put over the gates of this house would be—The rich and the poor meet together, for the *devil* is the maker of them all.

"I have not been able to find out any thing of the marriage customs of the provinces of France. Of course the peasants do not have any *dot* (dower). The women work as hard as men, and quite as much in the fields. These women are short, stunted, bony, strong, with large hands and feet, voices like men, and are very ignorant and very Catholic.

"The *dot*, or dower, is an institution in Paris. It is made necessary by the extreme difficulty of a young man to earn more than his support. Daughters often are a drug in the market. Marriages from love are common; but I believe these things usually go by the wishes of the parents. I am acquainted with a young gentleman here twenty-six years old; his mother wishes him to marry; he has no faith in woman; prefers his gay bachelor life; adores his mother. She wrote to him that she had selected a wife for him; a young girl of forty thousand francs *dot*. He did not answer the letter for six weeks, when there arrived an angry letter from his mother; he became contrite, and wrote back his acceptance of the young girl, who, meanwhile, had been trotted by her parents to his father's house. The latter did not consider the young lady good enough for his son, and negotiations were broken off without either of the young people having seen each other. Another anecdote, which is also true, is of a young gentleman who visited a family for the purpose of marrying one of the daughters. After a time, the parents demanded which daughter was his choice? The reply was—'Either, if they both have the same *dot*.'" This interesting letter is concluded with a little qualification for the fair correspondent's freedom in presenting the subjects upon which she had written. She says: "I have done the best I could, from my limited opportunities for observation, to let you know of Paris. I've laid aside my demoiselish scruples, put on common sense, and spoken on forbidden topics with the utmost frankness," etc.

Marriages of convenience have always a decided tendency to make husband and wife discontented, and these being in the majority in the higher circles of France, it is not singular that many liberties are taken and

tolerated by both husband and wife. "In France, Spain, Portugal, Italy, and much the largest part of the continent of Europe," says Nichols, "marriages are arranged by the parents of at least one of the parties. A girl, educated in seclusion, sees her intended but twice before he leads her to the hymeneal altar, once to be formerly introduced, and once to sign the marriage contract. If he has suitable position, it is enough; he may be old, ugly, repulsive; he has been chosen as her husband by those who ought to know what is best for her, and she accepts him with disgust because she must, or with indifference because she knows no better."

In Portugal the marriage customs do not differ much from those of Spain, except that ladies when married retain their maiden names. Females are more secluded than in Spain, but are quite as much given to intrigue and matrimonial infidelity.

The Swiss, who are noted for their free political institutions, while surrounded with despotism, cannot marry without the consent of the magistrates, whose permission or refusal is governed by the *fitness* of parties presenting themselves for marriage. It is required that there shall be adaptation between the parties, and this peculiar system of legalizing marriage results in happy families and hardy children. "At Geneva," says Goodrich, "the mode of life is extremely social. The *soirées* are constant from November to spring. These meetings resemble family assemblages, in their freedom from the constraints imposed by etiquette. A stranger is struck with the affectionate manner by which the women of all ages address each other. This comes from the influence of certain 'Sunday Societies,' in which children meet at their parents' house, where they are left to themselves and have a light supper of fruit, pastry, etc. The friendships thus formed endure through life, and the youthful expressions of fondness are never dropped." Divorces are very uncommon. The front door of marriage is guarded more than the back, and those who enter are generally too well satisfied to wish to get out.

In Italy, it has been remarked "that marriage is not a bond, but the reverse." Before marriage a lady is the prisoner of a convent, or the parental mansion, and is not allowed the society of gentlemen; but after she has become the wife, she may also become the lover of from one to three more besides her husband.

Byron, in one of his letters from Venice, said: "The general state of the morals here is much the same as in the Doges' time. A woman is virtuous, according to the code, who limits herself to her husband and one lover; those who have two, three, or more, are a little wild; but it is only those who are indiscriminately diffuse, or form a low connection, who are considered as overstepping the modesty of marriage. There is no convincing a

woman here that she is in the smallest degree deviating from the rule of right, or the fitness of things, in having a lover. The great sin seems to lie in concealing it, or in having more than one—that is, unless such extension of the prerogative is understood and approved of by the prior claimant." The same author further says, "They marry for their parents and love for themselves," and that a "person's character is canvassed, not as depending on their conduct to their husbands and wives, but to their mistress and lover." Still, remarks a noted historian, "a person may pass through Italy, or live there for years, and not once be shocked with such undisguised vice, as in one night will intrude upon him in an English city." Prostitution, as a trade, cannot flourish in such society. It is, of course, uncalled for, where infidelity among married ladies is so fashionably allowed, or where polygamy is legally tolerated.

In Greece, girls are kept in separate parts of the houses, in a state of seclusion, much the same as in Turkey. They are not permitted to enter society till after marriage, when the restriction is removed. Weddings there are celebrated with great *éclat*. A procession attends the bride to her future home, preceded by music and young girls dressed in white, who strew the path with flowers.

In Prussia, parties contemplating marriage are required to announce the fact in the newspapers. Matrimony among the higher classes is contracted on the title and "specie basis," as in most European countries. Infidelities, if discovered, are not overlooked, and divorces are of frequent occurrence—to the number of two or three thousand a year.

The Russian nobility conduct their marriages much the same as other Europeans. The peasantry, however, according to popular authority, have peculiar customs. The suitor applies to the mother, saying, "Produce your merchandise, we have money for it." When the bargain is concluded, the bride, at the wedding, is crowned with a chaplet of *wormwood*. "Hops are thrown over her head, with the wish that she may prove as fruitful as the plant. Second marriages are tolerated, the third are considered scandalous, and the fourth absolutely unlawful." The wives of the lower classes of Russians are treated in a shameful manner and their position is only one remove from that of a slave.

In Austria, where the monogamic system is the law, one might almost suppose that free love is the practice, if allowed to judge of the country at large by the official tables of the illegitimate children born annually in Vienna; these comprise nearly one-half the total births in that city. In 1853 there were about ten thousand legitimate and ten thousand illegitimate births. In 1854 there was a fraction over eleven thousand legitimate births, and nearly eleven thousand of those which were illegitimate; in 1855 there were about ten and one-

half thousand legitimate, against nine and one-half thousand illegitimate. In 1856 there were only about five hundred more legitimate than illegitimate offspring born in that city. If, as is claimed by many, illegitimate children are smarter, the Viennese ought to be a remarkable people!

In Wallachia, one of the Danubian principalities, "the bride wears a veil the day before, and on that of her marriage. Whoever unveils her," says a writer, "is entitled to a kiss; but to prevent too much impertinence, the bride may in return demand a present, and the request must be complied with." Unless kisses are decidedly scarce, and an object of consideration with the ladies of Wallachia, it would seem like an act of prudence to keep the lips and purse-strings closed.

In Sweden and Norway, the monogamic system is the law, and practical polygamy the violation; in the country first named, a species of practical omnigamy, or free love, prevails to a remarkable extent, though not under the sanction of law. Bayard Taylor, in a letter from Stockholm, remarked as follows:—

"After speaking of the manners of Stockholm, I must not close this letter without saying a few words about its morals. It has been called the most licentious city in Europe, and I have no doubt with the most perfect justice. Vienna may surpass it in the amount of conjugal infidelity, but certainly not in general incontinence. Very nearly half the registered births are illegitimate, to say nothing of illegitimate children born in wedlock. Of the servant-girls, shop-girls, and seamstresses in the city, it is very safe to say that scarcely one out of a hundred is chaste, while, as rakish young Swedes have coolly informed me, a large proportion of girls of respectable parentage, belonging to the middle class, are not much better. The men, of course, are much worse than the women; even in Paris one sees fewer physical signs of excessive debauchery. Here the number of broken-down young men, and blear-eyed, hoary sinners, is astonishing. I have never been in any place where licentiousness was so open and avowed—and yet where the slang of a sham morality was so prevalent. There are no houses of prostitution in Stockholm, and the city would be scandalized at the idea of allowing such a thing. A few years ago two were established, and the fact was no sooner known than a virtuous mob arose and violently pulled them down. At the restaurants, young blades order their dinners of the female waiters with arms around their waists, while the old men place their hands unblushingly upon their bosoms. All the baths in Stockholm are attended by women (generally middle-aged and hideous, I must confess), who perform the usual scrubbing and shampooing with great nonchalance. One does not wonder when he is told of young men who have passed safely through the ordeals of Berlin and Paris, and have come at last to Stockholm to be ruined."

In Turkey the first marriage is contracted by the parents of children, who are sometimes betrothed at the age of two or three years. When they arrive at adult age, the bride is carried in a procession to the house of the husband. But polygamy is the law of the Ottoman empire, and the husband is allowed to purchase as many more wives as he chooses. They purchase many girls of the Circassians, for which they pay from twenty to thirty dollars apiece for handsome ones. Once they were considered cheap at five hundred dollars. The wives of a Turk are kept in what is termed a harem, a place gorgeously fitted up, and attended by eunuchs.

Formerly, a Turkish lady never left the harem without concealing her face behind a great number of veils. The war between Turkey and Russia has effected considerable change in this custom, and now only one thin veil is used, through which the eyes of strangers look on beauties whilom concealed from the gaze of foreigners. The ladies of Turkey are said to enjoy nearly as much liberty as the females of Christian countries, where polygamy is not tolerated, and where ladies sell themselves to wealthy husbands. Turkish women bear more female than male children, a noticeable fact in all countries where the plurality system of marriage is maintained. A Turk can divorce a wife at pleasure, for if he have no real cause, he can make a false accusation, and sustain it by perjured witnesses, which can be obtained without difficulty; but he is not permitted to take her back again for the fourth time, unless, during the interval of the separation, she has been the wife of another man. Notwithstanding the little regard manifested for the marriage contract, death is the penalty for adultery.

With this cursory view of the matrimonial customs of the old world, we will now turn our eyes to our own continent, and see how we find

Marriage in the New World.

In South America, the marriage institutions of the people compare at least favorably with those of the semi-barbarous portions of the old world.

The Araucanians, in the southern part of Chili, with a population of four hundred thousand, believe that marriage is perpetual in this world and the world to come. Every man is allowed to have as many wives as his means will permit, the first being considered superior to the rest. The husband selects his partner for the night at the supper-table, by requesting her to prepare his bed. Buying and selling wives is practised to some degree. "Marriage is always celebrated with a show of violence, for even after consent is obtained, the bridegroom conceals himself on the road, seizes the bride, and carries her to his house." It is required that each wife shall present her husband with a fine cloak.

In Brazil, the civilized portion of its inhabitants maintain the monogamic system of marriage, and are said to be "exemplary in their domestic relations." It is not uncommon, however, to see an old man united with a young girl in marriage. Disparity in ages is considered no obstacle to a happy union. Among the uncivilized natives, polygamy is upheld, and ornaments are more profusely bestowed on the person than clothing by both sexes, and yet they have a fair reputation for chastity. Adultery is punishable with death. In the foundling hospital at Rio de Janeiro, the girls at a marriageable age may be selected at each anniversary for wives, if the applicants are approved by the managers of the institution.

Fig. 166.

A MESTIZO GIRL.

In Central America and Mexico, polygamy, monogamy, and omnigamy are practised, according to the respective conditions of their heterogeneous population. Only about one-fifth are white, and those are of Spanish origin, and imitate in a measure, the customs of their ancestors. The marriages among this class are generally celebrated with some pomp, "and the fee for the priest, even from parties of the lowest rank," says Goodrich, "is not less than twenty-two dollars, and this in a country where the houses of the poor cost but four dollars, where the price of labor is half a dollar a day, and where the church observances leave but one hundred and seventy-five working days in each year!" The remaining population is divided between Mestizos, Mulattoes, and Zamboes, many of whom are but little above the savage, go naked, and have no established forms of marriage. The Mestizos are the offspring of whites and Indians, and many of the females are said to be very beautiful. Those who do not associate with and imitate the customs of the whites, are omnigamic, and governed by their impulses.

In North America, the customs of the aborigines are interestingly daguerreotyped in a quotation from McIntosh's "Book of Indians," which I find in "Marriage, its History and Philosophy," by L. N. Fowler. "They are," he says, "generally contented with one wife; but they sometimes take two, and seldom more than three. The women are under the direction of their fathers in the choice of a husband, and very seldom express a predilection for any particular person. Their courtship is short and simple. The lover makes a present, generally of game, to the head of the family to which belongs the woman he fancies. Her guardian's approbation being obtained, an approbation which, if the suitor is an expert hunter, is seldom refused, he next makes a present to the woman, and her acceptance of this signifies her consent. The contract is immediately made and the match concluded. As soon as he chooses he is admitted to cohabitation; but the time of the consummation is always a secret to every one but themselves. All this is transacted without ceremony, without even a feast. The husband generally carries his wife among his own relations, when he either returns to the tent which he formerly inhabited, or constructs a new one for their own use. They sometimes, but seldom, remain with the wife's relations. When the wife is removed, if game be plentiful, he gives an entertainment to her relations. These contracts are binding no longer than both parties are willing. If they do not agree, they separate—the woman returns to her relations, and if they have any children she takes them along with her; but after they have children a separation very seldom takes place. If a woman be guilty of adultery, and her husband be unwilling to divorce her, he cuts her hair, which is the highest female disgrace. On the woman is devolved every domestic charge. She erects the tent, procures wood for the fire, manages the agricultural affairs, dresses the provisions, catches fish, and makes traps for small animals. The husband only employs himself in the chase.

"When a woman is with child, she works at her ordinary occupations, convinced that work is advantageous, both for herself and child; her labor is easy, and she may be seen on the day after her delivery, with her child at her back, avoiding none of her former employments. They suckle their children till they are at least two years of age. Their cradle was anciently a board, to which they laced their children, after having wrapped them in furs to preserve them in heat. This is set down in a corner, or hung up in a tent, and without loosening it from its cradle, the mother often takes it on her back and in that manner carries it about.

"Among the Indians, women cannot contract a second marriage without the consent of those on whom they depend, in virtue of the laws of widowhood. If they can find no husband for the widow she finds herself under no difficulties; if she has any sons to support her she may continue

in a state of widowhood, without danger of ever wanting any thing. If she is willing to marry again she may, and the man she marries becomes the father of her children; he enters into all the rights and obligations of the first husband.

"The husband does not weep for his wife, because, according to the savages, tears do not become men; but this is not general among all nations. The women weep for their husbands a year: they call him with out ceasing, and fill their village with cries and lamentations, especially at the rising and setting of the sun; at noon in some places; when they go out to work and when they return. Mothers do much the same for their children. The chiefs mourn only six months, and may afterward marry again.

"It appears that the Indians have their merriments on the marriage occasions, although their celebrations go off commonly without much ceremony. There are in all nations some considerable families, which cannot marry but among themselves, especially among the ALGONQUINS. In general the stability of marriage is sacred in this country, and for the most part they consider as a great disorder those agreements which some persons make to live together as long as they like, and to separate when they are tired of each other. A husband who should forsake his wife without any lawful cause must expect many insults from her relations, and a woman who should leave her husband without being forced to it by his ill-conduct would pass her time still worse.

"Among the Miamis, the husband has a right to cut off his wife's nose if she runs away from him; but among the Iroquois and Hurons they may part by consent. This is done without noise, and the parties thus separated may marry again. They cannot even conceive that there can be any crime in this. 'My wife and I cannot agree together,' said one of them to a missionary, who endeavored to make him comprehend the indecency of such a separation; 'my neighbor's case was the same, we changed wives and we were all happy; for nothing is more reasonable than to make each other happy, when it is so cheaply done without wronging anybody.' Nevertheless, this custom, as we have already observed, is looked upon as an abuse, and is not ancient, at least among the Indians."

"THE GREENLANDERS," Fowler remarks, "pay some little regard to the affections in their matrimonial alliances. In the negotiations, the parents never, or rarely, interfere; the lover thinks but little of a dowry with his wife. If she will make a good, kind, affectionate, and obedient *wife*, his highest anticipations are fully realized, and he has all he desires. About the time of the celebration of the nuptials, the bride pretends to be opposed to the marriage, runs away, screams, and is finally taken home by force by the bridegroom, which constitutes the sum total of the marriage ceremony.

Polygamy is occasionally practised, and divorce is said to be exceedingly common."

In the United States and Territories, which enjoy the most exalted position among the nations of the new world, all existing systems of marriage are more or less represented. In the States, the monogamic system only is recognized by law; pretty generally observed by wives, professedly so by nearly all husbands, and strictly so by many. In no country in the world are greater immunities enjoyed by the people in the selection of conjugal companions than in our own, and still wealth, distinction, and parental

Fig. 167.

GREENLANDERS.

dictation exert a mighty influence in match-making. Did the thought ever occur to the reader that daughters here are oftentimes *sold* in marriage by their parents or themselves, just as truly as they are in many heathenish countries? Such is a lamentable fact, and one which has not failed to make an impression on the minds of many observers.

"The accursed term, 'marriage of convenience,' fit only to be found in the mouths of an unfortunate or a libertine," says Dixon, "is now by no means too shocking to escape the lips of a fashionable mother, alarmed at

her husband's prospective failure, and the consequent loss of her box at the opera. She must make profitable sale of her daughters, because she cannot influence her sons, or their wives when they get them. Whether the article be merchantable or not, a sale must be effected. The father is too often so immersed in business, that he is scarcely consulted; the family physician never; or if he be, he is perhaps a time-server, and looks forward to a profitable return for withholding the truth."

Continues the same writer: "Riches, when combined with a tolerably decent family genealogy, are an object of boundless ambition, and in New York take precedence of all other recommendations. From the clergyman to the market-woman, all are equally blinded by it; neither dissipation nor an empty head are often drawbacks, whether in man or woman; and alliances are every day contracted where nothing but disgrace and mortification can reasonably be anticipated."

The almost invariable inquiry among friends, when a marriage takes place, is, "Has she done well?" which generally signifies, has she married a house and lot, a good supply of pretty furniture, or a large amount in bank and railroad stock, and a comfortable pile of money. This question is almost universally so regarded, so much so that the respondent, in reply, at once begins to tell either how rich or poor the husband is. If a wealthy position has been attained by the bride, parents and friends congratulate themselves on the success of the daughter, and the unanimous exclamation is, "She has done well." Young women in the highest circles often sell themselves to old men double or triple their age, or are so sold by parents, and do not seem to dream that they are bartering away their virginity and womanly charms for gold, the same, virtually, as the abandoned woman who walks the pavement in New York. True, there may be cases where mutual love exists in such unequal copartnerships, but these are manifestly rare exceptions.

On the other hand, a woman possessing wealth, though ugly in person or disposition, can always obtain a husband. Many young men at the outset stifle all love for girls in humble life, however amiable in disposition and prepossessing in appearance they may be, with the avowed object of marrying a fortune.

When considerations of wealth have little or no influence, parents often interfere to an unwarranted extent in the marriage of their sons and daughters. My eye has this day fallen upon two instances illustrative of this remark. A Chicago paper says: "The village of Colchester, on the Chicago, Quincy, and Burlington road, was the scene of a sad affair one day last week. A young lady of that place, the daughter of an estimable citizen, had for some time past received the addresses of a young man in opposition to the wishes of her parents. They remonstrated with her again and again,

but to no purpose. Finally, her father told her he would rather follow her to the grave than see her the wife of a man whom he regarded as unworthy of her. Shortly afterward the young lady was seized with an alarming illness, and in three hours more was a corpse. Just before dying, and when she knew she was beyond the reach of remedy, she confessed to having procured and taken a large portion of arsenic. The unhappy father's alternative was presented to him sooner than he could have believed it possible."

A Cincinnati paper records the following: "A beautiful German girl was taken to the Commercial Hospital yesterday, a raving maniac; her reason completely overthrown by disappointment in love. It seems that she had been engaged to one of her countrymen for some months, and had fully expected to become his wife, when her father informed her last Saturday that she should not marry.

"Upon the announcement she fell, as if struck by lightning, to the floor, and it was with much difficulty she was restored to consciousness. She then began raving frightfully, and with cries and screams and groans and tears and lamentations, startled the whole neighborhood of Bremen Street, where she resided. Nothing could be done to calm or appease her; she grew worse and worse, until it was determined to remove her to the hospital.

"When there she continued to rave, and would have died from exhaustion very soon, had not chloroform been administered to keep her quiet. It was found necessary, too, to bind her to the floor, else she would have taken her life, leaped out of the window, or done any thing desperate. The physicians who saw her say they never beheld so violent a maniac.

"It is pitiable to observe this young and beautiful woman, just in the spring of life, suffering—and how intensely she must suffer—all the horrors of madness, because of a generous and absorbing passion, which might and should have been made her happiness on earth."

These are by no means isolated cases; the press teems with such sad recitals. Let me not be understood as disparaging parental counsel—only parental tyranny. Parents should always give advice to children in matters pertaining to the selection of a conjugal companion, and at this point all interference or dictation on their part should stop. If the laws of physical and mental adaptation were more generally understood by them, and their positive interference in the selections of their sons and daughters based unselfishly on these rules, then might their prohibitions in all cases be regarded as best for the interests of their children. But seldom are parents qualified to decide in this matter, all dictation on their part arising from their own likes or dislikes, as if their children were bound to love everybody whom they love, and dislike all who are not prepossessing to them. This kind of interference oftener thwarts physical and mental adaptation

than favors it, because love seldom springs up spontaneously between a youth and maiden, when there is mental and physical uncongeniality. For this reason parental interference, ungoverned by phrenological and physiological knowledge, oftener prevents than effects the right kind of marriages.

American wives, with occasional exceptions, are faithful to their husbands, and many husbands, particularly in the rural districts, are faithful in return. But the fact that over *one hundred thousand* public prostitutes, and at least an equal number of private mistresses, are supported in the United States, and many of them in extravagance and splendor, leads us to the irresistible conclusion that, while monogamy is the law in state and society, polygamy is the custom of not a small proportion of the male population. It is a proverbial remark in New York, that the abandoned females of this city are maintained chiefly by the patronage of married men visiting the metropolis. Singular disclosures in fashionable life, growing out of a recent notorious affair, go to show that it is not impossible for wives to imitate their husband's vices.

Occasionally cases occur of mutual exchanges, transient or permanent. There is now living in a New England city, a couple of husbands, in respectable position, who traded wives by consent of all parties concerned, several years ago. The gentlemen were copartners in business at the time of the exchange, and the two families have since lived on terms of friendship, with no desire to trade back! Although this may sound like a strange story, it is a veritable fact, and indeed not so strange as an account I recently read of a couple of husbands in Illinois who traded wives, one of them receiving "boot." The one who was so ungallant as to receive the premium on the exchange, however, was driven from the village by some of the indignant villagers, while the other was allowed to remain unmolested in the possession of his newly-acquired spouse. From the fact that names and location were all definitely given, I presume this story is true.

Transient exchanges are not uncommon among some of the married people of large cities; but permanent ones, unless effected by elopement, when the bargain is all on one side are certainly rare occurrences. "Lycurgus, the great legislator of the Lacedæmonians," it is said by an historian, "thought that freely imparting wives to each other was the best way of preventing jealousy, ridiculing those who thought the violation of their bed an insupportable injury." Those who exchange are probably disciples of his theory.

The condition of American wives is various. Some are dolls—some companions—many drudges. Happy marriages are common—unhappy ones more common—tolerably happy ones most common.

Divorce laws differ in the various States, although in all, I believe, the wife is guaranteed the same legal relief as the husband. Several States grant divorces on the ground of cruelty, intemperance, willful absence,

fraudulent contract, as well as adultery. A few limit the cause to the latter, and the erring party is debarred the privilege of marrying again—a provision which cuts off all probability and encouragement of a reformation on the part of the offending one. The result of such one-sided divorces is, that the man or woman against whom the decree has been rendered is almost daily tempted to an infraction of law, or indulgence in illicit amours, and this temptation is too strong for a great many to resist. Again, it is the law in most States, where divorce is granted and alimony is given the wife, that the alimony shall terminate if the divorced woman remarries. This, too, is not only offering a premium to unlawful intercourse, but it is unjust to the woman, especially in cases where she has been for many years the wife of the husband from whom she is separated. If he remarries, he brings to his new wife the accumulations of his former marriage, and there is no good reason why, if the wife remarries, she may not carry to her new husband that portion to which she was equitably entitled, when her former matrimonial connection was dissolved.

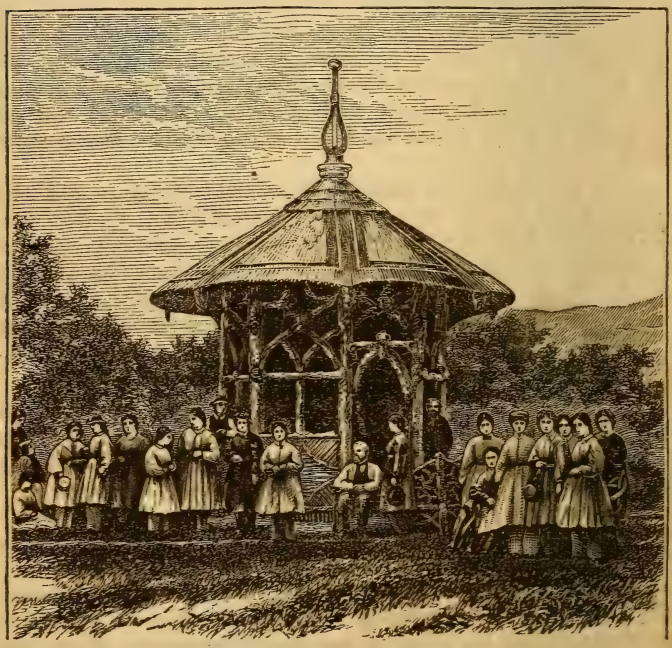
Some of the States punish adultery with imprisonment—others with fines—others not at all—and in every State a husband is leniently dealt with, who takes the life of the violator of his marriage-bed. Indeed, public opinion zealously upholds the monogamic system in this country, and society severely criticises any violations thereof which obtain publicity, especially if the offender be a *woman*. Nevertheless, we have two marked departures from monogamy, which are at the present writing in a flourishing condition, and this essay would be incomplete if they were to be omitted.

The Oneida Community, to quote its own description of itself, "is an association living in Lenox, Madison County, N. Y., four miles from Oneida depot. Number of members, two hundred and two; land, six hundred and sixty-four acres; business—horticulture, manufacturing, and the printing of a newspaper called the *Circular;* theology—perfectionism; sociology—Bible communism. There are two branches of this community: one called the Willow Place Community, which is located on a detached portion of the domain, about one and a quarter miles from the Oneida Society. Number of members, thirty-five; business manufacturing. The other branch is the Wallingford Community, situated in a village by that name in Connecticut, and one mile west of the village depot. Members, forty; land, two hundred and twenty-three acres; business, horticulture, publishing, and job printing. The Oneida Community and branches are not Free Lovers in the popular sense of the term. They call their social system Complex Marriage, and hold to freedom of love only within their own families, subject to free criticism and the rule of male continence."

The foregoing is substantially their card, as presented in their weekly paper called the *Circular*, a publication which is interesting even to those

who entirely disagree with them in their social and religious theories. Their history is presented by themselves in the following language: "As the pilgrim fathers fled from old England to New England, so, in 1848, the leaders of the Oneida Community fled from New England, to New York, and settled in Lenox, Madison County, on the banks of the Oneida Creek. There they were joined by other families and members from New York, New Jersey, Vermont, Massachusetts, and Connecticut, till their numbers amount-

Fig. 168.



A GROUP OF THE ONEIDA COMMUNISTS.

ed to about two hundred and fifty. They were much despised in the first years of their settlement, but God prospered them, and they went steadily forward, buying land, building houses, and establishing manufactures, till they are now, after twenty years, in a fair way to be as respectable as their Puritan forefathers.

"The main religious features of the Community consist in an inexpungable notion that Christianity means the abolition of selfishness; that Jesus

Christ came into the world as an emancipator from that kind of slavery; that whoever soundly believes and confesses him, is thereby freed; that his kingdom was founded and his second coming took place eighteen hundred years ago; and that all progress, civilization, and reform since, have been the fruit of the heavenly organization of which he is the centre.

"The Community believes with Christ, that marriage ownership is to be abolished when the will of God is done on earth as it is in heaven (Matt. xxii. 30); with Paul, that the marriage spirit is the greatest of all distractions and diversions from Christ (1 Cor. vii.); with Socrates, that the improvement of the human race requires scientific attention to breeding, the same as in the case of other animals (Plato's Republic, b. v., chap. 8); and they claim to have discovered a new physiologico-moral principle, which they call *male continence*, by means of which the new state of society demanded by Christ, Paul, and Socrates, becomes practicable." What they mean by "male continence" may be learned by turning to page 876.

The women of the Community, as will be seen in the engraving presented of the Oneida Communists, are all attired in short dresses, a costume which enables them to mingle with and aid the men in all their horticultural and manufacturing pursuits. The men assist the women in all domestic work, doing those portions of household labor which require muscular strength. In the seasons of harvesting and gathering fruit, the work is done by "bees," composed of people of both sexes; under the gayety of which the work is dispatched with pleasure and alacrity. As some of my metropolitan readers may not know what a "bee" is, I will tell them. In farming districts, it used to (and may now) be the practice, when a large field of corn was to be gathered, to invite all the neighbors, male and female, on a beautiful moonlight night, to what they called a "husking bee." In this way a task otherwise consuming many days of the farmer's time, would be speedily dispatched with crispy jokes, town gossip, and the merry laughs of the boys and girls, frolicking about among the corn shocks. The "bees" of the Community differ from the old-fashioned kind, I suppose, in their being applied to nearly all descriptions of labor, and worked by sunlight as well as by moonlight.

As all the members, male as well as female, are workers, and all necessaries not produced by themselves purchased in wholesale quantities and at reduced prices; and, further, as there is no competition between them as to who shall wear the finest apparel, and furnish a house the most luxuriously, it does not require eight or ten hours' labor on the part of any individual member to sustain the finances of the Community. They have been steadily growing in moral and material strength until they have earned the respect of their surrounding neighbors, and attained, in a pecuniary point of view, competence, if not independence. Meanwhile they devote many hours each day to moral, intellectual, and artistic culture. The age of manhood and

womanhood is not considered a stopping-place in an educational point of view, but the old people are practically still attending school. A visitor will find among these peculiar people members of all ages pursuing a variety of studies, including music, languages, etc. They have a library, large reading-room, and a hall for lectures and entertainments. They also have, without calling on the outside world, an orchestra composed of competent performers on brass and other instruments. Concerts are often given by these musicians, and are extensively attended by the people from the surrounding country. Their women are modest, intelligent, and many of them personally attractive, and all of them apparently happy.

The question will very naturally arise in the minds of inquiring readers, "What of their children?" My personal knowledge of them is too limited to enable me to reply, as I have visited but once the Wallingford branch. I will present, however, at some length, their own testimony, as published in their paper.

"The critics of Communism," they say, "have to admit that in money matters and material surroundings, either the blessing of God is upon us, or we are obeying some great law of nature that brings prosperity; but they say or insinuate that in the deeper and more important matters of propagation and training of children, Communism shows signs of failure. We take issue with them on this point. After mature investigation and reflection, our belief and affirmation is, that the same blessing of God and prosperous obedience that is at work in our material enterprises is manifest in the life and growth of our children.

"In our last number we stated some facts in relation to the results of the entire administration of our children's house for twenty years—that there have been but two deaths there in all that time, and that the graduates of that department are now strong men and women, acquitting themselves well in the business of the Community and in institutions of learning abroad. We have much more to say, and some good stories to tell, about the general career of the children's house and its graduates; but for the present number we will confine ourselves to a survey of that department as it now stands—a look at the present generation of Community children.

"As the main dispute between us and the critics is about the vital and intellectual condition of our children, we have thought it best to take an inventory of the health and brains of those now at the children's house. The following are the results of careful inquiries and measurements by T. R. Noyes, M. D.:—

"'The children's house takes children at about the age of sixteen months, and keeps them to the age of eleven or twelve years. Nursing infants are otherwise provided for. The present number of inmates is twenty-five, of whom ten are boys and fifteen are girls. The following tables give the age,

height, weight, size of head, and size of chest of each boy and girl, by which physiologists, and others who choose to compare these statistics with average measurements, may form some judgment of the physical condition of these children:—

Boys.	*Age.*	*Weight.*	*Height.*	*Size of head.*	*Size of chest.*
Clarence	12 years.	76½ lbs.	4 ft. 10 in.	21 in.	29½ in.
Harley	7 "	47¾ "	3 " 11 "	21 "	24½ "
Wilfred	7 "	46½ "	3 " 10 "	22 "	23½ "
George	6 "	43½ "	3 " 7¾ "	21 "	23¼ "
Harold	6 "	36¾ "	3 " 6¼ "	19½ "	21½ "
Temple	5 "	36½ "	3 " 5¼ "	20¾ "	21¼ "
Ormond	4 "	42¼ "	3 " 6 "	21 "	22¾ "
Ransom	3 "	35¾ "	3 " 1½ "	20⅝ "	22½ "
Horace	2 "	29¼ "	2 " 10½ "	19⅝ "	21¼ "
Eugene	2 "	28½ "	2 " 9 "	20 "	21¾ "

Girls.	*Age.*	*Weight.*	*Height.*	*Size of head.*	*Size of chest.*
Lily	11 years.	71 lbs.	4 ft. 6 in.	20⅞ in.	26½ in.
Rose	11 "	39¼ "	3 " 8 "	20¼ "	21¾ "
Edith	10 "	65½ "	4 " 6¼ "	21¼ "	26 "
Leonora	9 "	55 "	4 " 2⅓ "	19¾ "	24 "
Marion	9 "	55¾ "	3 " 11⅝ "	21⅛ "	25 "
Mabel	9 "	64½ "	4 " 2¼ "	21¾ "	26½ "
Emily	7 "	42 "	3 " 7¾ "	19 "	23¼ "
Theodora	7 "	45 "	3 " 9⅓ "	20⅜ "	22 "
Anna	6 "	43½ "	3 " 7¼ "	19¾ "	22 "
Fanny	5 "	39¾ "	3 " 7 "	19⅞ "	22½ "
Cosette	5 "	34½ "	3 " 6½ "	19½ "	22¾ "
Lucy	5 "	37½ "	3 " 4¾ "	20½ "	22¼ "
May	4 "	31½ "	3 " 1 "	19⅔ "	21 "
Virginia	4 "	31¼ "	3 " 2¼ "	20 "	21½ "
Maud	3 "	31½ "	2 " 11¼ "	19⅔ "	22 "

" 'Seventeen of these children have been always healthy, or only subject to the ordinary slight illnesses of young persons. Several had the scarlet fever when it was prevalent in the neighborhood; but the *sequelæ* have been slight.

" 'Five were quite delicate in infancy, but have steadily improved under the care of the department, and are now, in the ordinary sense of the term, healthy children. One of them has a habit of constipation, brought on by bad management soon after birth, but is likely to outgrow it.

" 'Two that are sisters inherit diseased tendencies, their mother's family having been very scrofulous. The elder (Rose in the table) was deformed by rachitis (rickets) at five years of age, but is now otherwise in good health. The younger has exhibited a tendency to the same disease, but appears to be safely passing the crisis of danger.

" 'One boy (Wilfred in the table) was the offspring of parents who were both deficient in physical stamina, but bright intellectually. He has shown some tendency to hydrocephalus, but is outgrowing it. He is very ingenious, and bids fair to be a strong, healthy man. None of these children show any signs of imbecility. The only abnormal brain is that of Wilfred, which is a little too large. The only deformity is that of Rose. There are no "sore eyes" among them, or other chronic local diseases.'

"It would be easy here to go into discriminations that would prove that what little there is in the above showing that is unfavorable, is not chargeable to Communism. But we ask no favors. Let the critics make the most of the weaknesses reported. There is nothing at all resembling the degeneracy which they wish to make out. It is a cleaner bill of health and brains than they can find in any common neighborhood."

Following the above, are the testimonies of a schoolmaster and schoolmistress, who had had previous experience in teaching the world's children. They claim that the Community children are brighter, more studious, and better behaved than those in ordinary communities. "For mental ability," remarks the schoolmistress, "I have found them to be rather above the average, particularly those born in the Community. Many of them possess a knowledge of geography that older persons might envy. The location of places; the points of interest about Nineveh, Babylon, Rome, and other places; the noted mountains and rivers; and the ocean, with its capes and islands, are known to the Community children not in a dry mechanical way, but as exciting realities. They will tell you about them, with a brightness of expression and earnestness, that makes you almost feel they have been there themselves. Living together, they stimulate each other, and create an enthusiasm that makes them studious, and desirous of acquiring knowledge. This is caught by the little ones, who very early show a love for books. They learn their letters among themselves, and on coming to school, need restraining rather than urging. The wide range of thought in the Community, is felt by the children. In general knowledge they are superior to those in the world. Their memories are excellent; a little girl of ten recited a long chapter of 'Hiawatha' without being prompted a word. They frequently get up little entertainments of music, tableaux, and plays, that are original, and both amusing and edifying. Teaching here has improved me more than any previous experience."

In a subsequent number of their *Circular*, they present the following facts and figures about the older children: "Some years ago," they remark, "when our principles were under a darker shadow of suspicion and foreboding than they are at present, there crept among us (whether from abroad or from inside, whisperings we cannot say), an insinuation that our social life was '*stu t'ny*' our young women. Two or three cases of small stature

among the girls gave a slight plausibility to the notion. Whereupon the matter was put on trial by systematic investigations and measurements; and it was ascertained that more than three-fourths of our young women were taller than their mothers! And what is still more curious, since then another set of young women have come on the stage of womanhood, that are taller and larger than any that have gone before them, actually threatening to overtop the men, and fill the Community in a few generations with Amazons and giants! It is now said that twenty-six of our young women are taller than their mothers!

"To show what sort of a young crop of both sexes we are raising, we give in the following tables the age, weight, and height of a dozen of our young men, and a dozen of our young women. Take notice that these are all graduates of our children's house. They were not all born in the Community, but they were all trained here from childhood:—

Young Men.	*Age.*	*Weight.*	*Height.*
F. Wayland Smith	27 years.	144 lbs.	6 ft.
Alfred Hawley	21 "	155 "	6 "
Milford Newhouse	21 "	149 "	5 " 10½ in.
Edward P. Inslee	23 "	166 "	5 " 10 "
James Vaill	18 "	142 "	5 " 10 "
Victor Hawley	25 "	133 "	5 " 9¾ "
Charles A. Burt	23 "	125 "	5 " 9½ "
Charles L. Van Velzer	27 "	166 "	5 " 9¼ "
Ernest W. Noyes	17 "	137 "	5 " 9 "
George N. Miller	23 "	136 "	5 " 9 "
Joseph J. Skinner	27 "	140 "	5 " 9 "
Charles A. Cragin	27 "	132 "	5 " 8¼ "

Young Women.	*Age.*	*Weight.*	*Height.*
Alice M Ackley	21 years.	149 lbs.	5 ft. 7¾ in.
Susan Worden	24 "	150 "	5 " 6 "
Florence Clarke	18 "	121 "	5 " 6 "
Elizabeth Mallory	22 "	129 "	5 " 5¼ "
Cornelia J. Worden	20 "	155 "	5 " 5 "
Arabella Woolworth	18 "	144 "	5 " 5 "
Harriet N. Olds	19 "	139 "	5 " 5 "
Eliza Burt	26 "	123 "	5 " 4½ "
Martha Hawley	17 "	129 "	5 " 3¼ "
Virtue Conant	16 "	142 "	5 " 3 "
Consuelo B. Noyes	18 "	132 "	5 " 3 "
Alice E. Nash	20 "	124 "	5 " 2½ "

RECAPITULATION.

Average weight of males	143¾ lbs.
" " " females	136½ "
" " " males and females	139⅓ "
Average height of males	5 ft. 9¾ in.
" " " females	5 " 4½ "
" " " males and females	5 " 7¼ "

"We have one girl, only fourteen years old, that might have gone into the above table with credit; but we reserve her case for future reports, as she is growing yet. Her present weight is 131 pounds, and height 5 feet 6½ inches! These are selected specimens of course. Farmers always send their best to the fair. But we had to leave out others as good as these, in making out the dozens. They do not exaggerate the strength of our rising generation. Now let us see what our young folks have done and are doing. We will not confine ourselves to those named in the tables, but take into view all of what we call the 'second generation,' who have grown up in the Community, and are now taking its business and burdens from their fathers' shoulders. And first we will name some of the oldest class, who were not inmates of the children's house, but yet owe much of their breeding to the Community.

"Henry and George Allen were the chief representatives of the Community in the New York Agency, and have contributed largely to its business reputation by their labors as traveling agents for its various manufactures. Martin and Myron Kinsley are known extensively as enterprising business men. One is now head of the farming department at Wallingford. The other is general superintendent of our trap works. Otis and George Kellogg are also well known as agents of the Community at the banks, telegraph offices, and freight depots, here and at Wallingford. Boswell and Victor Hawley are among our best machinists. The former has done invaluable service in the trap business by many inventions. John F. Sears is a genius of high order in mechanics, an expert in microscopy, and has made several microscopes of great merit. Among this older class of the second generation we may name also on the women's side, Harriet Allen, who is now mother of the children's house; Elizabeth Hutchins, who is the general superintendent of the silk-works, having fifty hired girls under her care; and Carrie Macknet, who has served with distinction as chief bookkeeper of the Community. Coming to the younger set, who were trained in the children's house, we mention: Charles A. Cragin, the founder of our silk business. After serving (in connection with Harriet Allen and Elizabeth Hutchins) an apprenticeship of four months at a silk factory in Willimantic, Conn., he commenced manufacturing at Willow Place, and achieved at once complete success and a first-rate reputation in the silk market. He is now making one hundred and fifty pounds of machine twist (worth $2,000) per week. Edward Burnham is superintendent of the children's house. Francis W. Smith is an accomplished violinist, and was several years leader of our orchestra. Frederick Norton is a skillful and scientific dentist, versed in mallet filling, and all the latest improvements. George N. Miller is an expert in drawing and wood-engraving. Edward P. Inslee is foreman in the machine-shop. Charles Burt is foreman of the carpenter's

department. Alfred Hawley was foreman of the finishing part of the trap-shop before he was twenty years old. Sydney Y. Joslyn is foreman of the horticultural department. Tirzah C. Miller is editress of the *Circular*. Mary L. Prindle, Augusta Hamilton, and Helen C. Miller, are expert phonographic reporters. Ann S. Bailey is present chief book-keeper, dealing with banks, assessors, and business men all over the country.

"Our students at the scientific school of Yale University, at the present time, are William A. Hinds, who has formerly served the Community as financier, business agent, superintendent of various businesses, writer, reporter, printer, etc., and is now in good standing as a scholar; and Joseph J. Skinner, now in his third year at Yale, and said to be the first scholar in his class. A part of his record is, that with only the common advantages of Community boys in his previous education, he undertook to prepare himself to enter the scientific school on the short notice of *seventeen days*, and at the end of that time actually passed a rigorous examination in geometry, trigonometry, algebra, and history, besides the common branches of geography, grammar, etc.

"Theodore R. Noyes and George E. Cragin, both alumni of the children's house, were our first students at Yale, and graduated there a year ago in the medical department of the University. Their previous education in the Community gave them a standing in mental discipline and general information fully equal to that of college graduates. Their proficiency as medical students was indicated by the fact that one of them was selected by a leading surgeon of New Haven, as his office assistant, and the other by the Professor of Physiological Chemistry, as his assistant in a course of chemical lectures before the college classes. The committee that examined them at their graduation, reported as follows, in the "Proceedings of the Connecticut Medical Society for 1868," Vol. 3, No. 1:—

"'The following gentlemen were examined and recommended for the degree of M. D.:—

"'George E. Cragin, Wallingford. Thesis, Oxalic Acid in Rhubarb.

"'Theodore R. Noyes, Wallingford. Thesis, Experimental Researches on the Elimination of Urea.

"'Julian Newell Parker, Mansfield. Thesis, Sleep.

"'Alfred Eastman Walker, B. A., New Haven Thesis, Inflammation.

"'William Virgil Wilson, New Haven. Thesis, Wounds in general.

"'The theses of the first two gentlemen were based upon very elaborate original research—and the results obtained were deemed so important that the Board voted that the thesis of Mr. Noyes be sent for publication to the "American Journal of Medical Sciences," and that the thesis of Mr. Cragin be recommended for publication in the Transactions of the Conn. Med. Society.'

"These two young men are now engaged in the general business of the Community, T. R. Noyes as director of finances and silk-dyer, and G. E. Cragin as superintendent of fruit-preserving. At the same time they attend to the sick and wounded, and look after the general hygiene of our camp.

"This account of our young people is by no means exhaustive. Many creditable examples are necessarily omitted. If it were intended to be a roll of honor, it would be very incomplete. But it is sufficient as an answer to those who disparage our rising generation, and pretend to foresee the failure of Communism, in the degeneracy of its children."

Readers who have thus far perused this account of a new and novel system of society, springing up right in the midst of our own, will unquestionably feel interested in the following extract of a letter by a physician respecting the health of the women of the Community, for it is well known to every reader, how common it is for those living in our system of society to possess and exhibit physical infirmities of some kind. The letter was addressed to the Communists and published in their paper in 1868, and I transcribe it entire, with the qualification that while my observations during one visit to the smaller Community at Wallingford do not enable me to indorse all that he says, I saw nothing to cause me to doubt the correctness of his entire testimony.

"I too," writes the medical man, "would like to give my impressions on first visiting your family; that you may better understand me, I will tell you briefly the circumstances which led me to make my first visit. I had observed in my practice as a physician, that in all cases of chronic disease of women there was sexual derangement, and that physicians who ignored this would only alleviate present symptoms and not effect a permanent cure. Nor could they secure as good results as with men. I saw that I could have no success as a physician, by prescriptions that would produce present comfort without reaching the radical cause of the disease. If I relied upon hygienic means I must understand all the causes of derangement, as well as the physiological condition to be established.

"The most superficial observation convinced me that the cause of this frequent prostration of woman must be in her sexual experiences. All could not be congenital, or from any other cause that makes woman's life different from man's. It needed but little reflection to be convinced that the divine law was not sought—was habitually broken—and the consequences fell most heavily upon woman. The cause was soon apparent, and I became enthusiastic in my investigations and reflections, and they resulted in the conviction that the sexual relation has a double purpose—physical and spiritual—that both are ignored in the common practice of the world in cohabitation, in and out of marriage, and lustful desire, most frequently on the part of one, was substituted for divine law. I never thought of ques-

tioning the sanctity of marriage, but only of reforming its abuses. I had analyzed the consequences of the sexual love, seen the distinct spiritual and physical effects—knew that the one could be secured without the other. But how to educate men and purify the relations of marriage I could not see, and I was sure the diseases of women must increase till there was a change.

"While deeply exercised on these points, a young man from Illinois came into my family and school, then in Jamestown, Chautauqua Co., N. Y., and showed me the first copy of the *Circular* I ever saw, and gave me the first knowledge of the O. C., I ever had. An article on Education, I think from Mr. Noyes, so interested me and was so in accord with an essay I had published, that every thing about you interested me, and nothing more than the young man's statement that you rejected the institution of marriage on religious grounds. Crude as were his ideas of your motives and practices, they led me to say that, '*If I could once put my eye upon the women of such a community*, I could satisfy myself whether or not my own theory was correct.' This was the sole object of my first visit, though I had held to a community of property for ten years. I was received hospitably, and spent three days very delightfully, asked few questions, and none about your social relations, but probably made as careful observations of all social and affectional expressions as have been made before or since. I am sure no one ever prayed more earnestly for light, for I felt that the whole human race was rushing into a terrible emergency.

"On my return I reported that the women of the Community seemed more healthy than the average,—they showed more intelligence,—they had more and better use of the physical faculties; but what interested me more than all, was that in their social intercourse, which seemed very free and unrestrained, there seemed less of that morbid craving of one sex for the other, than I had ever known in any people I had visited. I had studied the effects on the countenance of uterine disease until I could often determine quite accurately from the countenance the phase of disease that afflicted the patient before me, and I was rejoiced at not finding *any of these signs in the countenances* of those I met while at Oneida.

"I was not blind to the advantages of varied occupation, better food than the average, extended social privileges and many other things that go to make up the advantages of community life, but I was sure the practices of the Community in the sexual relation did not enfeeble women as in marriage. Still I had only the most general idea of your theory, and I have since learned that then I had not a correct idea. I was not ready to express my own convictions, nor did I care to bias my mind by the conclusions of others until I had further confirmed the result of my own previous observations.

"After four or five visits to the two Communities, I have frequently said to those who inquired of me, that I had never seen elsewhere, women that showed such harmonious and integral culture,—so many indications of physical health,—so cheerful and thoughtful expressions of countenance, and so much general ability to execute what they undertake.

"Since my first visit I have had much experience, medical and social, that has made this social question of more interest to me, especially while making insanity a specialty. I am satisfied the terrible wrongs resulting from the prevailing social state, must soon be corrected. But I need not dwell on that. I wrote only to express my admiration of the effects of community life on all its members, but especially on woman. My opportunity to judge of the relative condition and promise of the children has been limited, and I pronounce no opinion, but for myself I have no doubt."

Next I will introduce the reader to a "Declaration of Principles" as held by the Communists and promulgated in one of the issues of their weekly paper. The article is headed "FREE LOVE." "This terrible combination of two very good ideas—freedom and love,"—they remark, "was probably first used in our writings twenty years ago, and originated in the Oneida school of socialists. It was, however, soon taken up by a very different class of speculators scattered about the country, and has come to be the name of a form of socialism with which we have but little affinity. Still it is sometimes applied to our Communities; and as we are certainly responsible for starting it into circulation, it seems to be our duty to tell what meaning we attach to it, and in what sense we are willing to accept it as a designation of our social system.

"The obvious and essential difference between marriage and whoredom may be stated thus:—

"Marriage is a permanent union. Whoredom is a temporary flirtation.

"In marriage, communism of property goes with communism of persons. In whoredom, love is paid for by the job.

"Marriage makes a man responsible for the *consequences* of his acts of love to a woman. In whoredom a man imposes on a woman the heavy burdens of maternity, ruining, perhaps, her reputation and her health, and then goes his way without responsibility.

"Marriage provides for the maintenance and education of children. Whoredom ignores children as nuisances and leaves them to chance.

"Now in respect to every one of these points of difference between marriage and whoredom, *we stand with marriage.* Free love with us does *not* mean freedom to love to-day and leave to-morrow; nor freedom to take a woman's person and keep our property to ourselves; or freedom to freight a woman with our offspring and send her down stream without care or help; or freedom to beget children and leave them to the street and the

poor-house. Our Communities are *families*, as distinctly bounded and separated from promiscuous society as ordinary households. The tie that binds us together is as permanent and sacred, to say the least, as that of marriage, for it is our religion. We receive no members (except by deception and mistake), who do not give heart and hand to the family interest for life and forever. Community of property extends just as far as freedom of love. Every man's care and every dollar of the common property is pledged for the maintenance and protection of the women and the education of the children of the Community. Bastardy, in any disastrous sense of the word, is simply impossible in such a social state. Whoever will take the trouble to follow our track from the beginning, will find no forsaken women or children by the way. In this respect we claim to be a little ahead of marriage and common civilization.

"We are not sure how far the class of socialists called 'free lovers,' would claim for themselves any thing like the above defence from the charge of *reckless* and *cruel* freedom; but our impression is that their position, scattered as they are, without organization or definite separation from surrounding society, makes it impossible for them to follow and care for the consequences of their freedom, and thus exposes them to the just charge of licentiousness. At all events their platform is entirely different from ours, and they must answer for themselves. *We* are not 'free lovers,' in any sense that makes love less binding or responsible than it is in marriage."

Fig. 169.

REV. J. H NOYES.
The Founder of the Oneida Community.

Under the head of "A Social Analysis" they present the following disquisition on marriage, prostitution, old maidhood and Communism: "Let us," they say, "analyze the position of women in ordinary society, and see what are the chances that are offered to them. Women require, like men, or perhaps more than men, two things for their proper existence, viz.: 1, a guaranty of bodily support; and 2, love, or social appreciation. These two

things sum up, for women, the primary natural wants around which all others are grouped. Now the last-named necessity—the love part—would take care of itself if allowed to act separately. The attractions with which women are created would secure their due supply of affection, free from all conditions or exactions, if they could have independent play. But the weakness of women on the point of *support* enables society to complicate this matter with the love question, so as to enforce their being treated together; and the consequence is that man is placed in a position to offer women certain alternatives, one of which she must accept. Having appropriated to himself the learned professions and the lucrative industrial pursuits; having made it disreputable for women to pursue much other business than that of millinery work and attending the nursery, and having shaped their education accordingly; having in short got immensely the start of woman in the opportunities of self-support and made her substantially dependent on him for her maintenance, he then comes forward with his proposal. He says to woman, I will furnish the two wants of your nature, love and support, if you will make yourself over to me, and become my property for life, be at my disposal, rear my children, and wear yourself out if need be in my service. This is the offer of marriage, which society sanctions and deems an honorable destiny for woman. As it is the best alternative that is offered, women generally accept it. Their youth is spent in looking at marriage, as the crisis of their life, hopefully it is true, for it is to be the advent of love; but misgivingly also, for it is to be the end of their personal freedom. Their attitude reminds one too much of the wistful gaze of a party of slaves about to be sold, seeking to discover their future fate in the faces of their masters. Their lot is fixed by marriage—the die for them is cast—their liberty is surrendered—for better or for worse, their identity is sunk in that of their accepted lords. One cannot wonder at the solicitude with which such an event must be expected, or fail to admire the patient grace with which the sex has made the best of its hard conditions. Though in many cases the promises on the part of the man, of love and support, are left wholly unfulfilled, yet woman being married, disdains to complain, buries her wrongs in silence, and looks for happiness in the world beyond the grave.

"So much for the marriage alternative. But there are two others. Bear in mind that loving and being loved is a necessity of women, nearly as much as subsistence, and if for any reason they are deprived of the chance of securing both these wants by selling themselves in marriage, then they are under an inducement at least, to try to gain one of them regardless of the other. To women in this situation men are always ready to say, We will offer you our love, or a passion which is its representative, providing it is to be temporary, and that you do not ask us to be responsible for your support. A class of

women in every country take up with this second alternative, enjoying a *quasi* social existence, but generally ending life in the hospital or alms-house. This is prostitution.

"The third and last alternative of women is to reject alliance with man both in the respectable and the disreputable way, and consent to spend lonely, thriftless, anomalous lives, as old maids, living on the merest alms of society. These different arrangements comprise all the chances offered to woman by civilization as it is, and may be presented thus:—

"I. Man *offers* woman LOVE AND SUPPORT (not always paid). He *exacts* of woman—sacrifice of maiden name and of independence; life-long servitude, personal surrender to his ownership, even to the ruin of her health if he pleases. STATE—*marriage*.

"II. He *offers* woman LOVE WITHOUT SUPPORT (of equivocal quality). He *exacts*—sacrifice of reputation; conditions tending to vice; final desertion, poverty, and misery. STATE—*prostitution*.

"III. He *offers* to woman TOLERATION AND ALMS. She realizes social insignificance. STATE—*old maidhood*.

"Of the three conditions, that of marriage is by far the best, and yet one cannot but see that it is imperfect. It savors of selfishness driving a hard bargain. There is something essentially base in the act of society reducing women to dependence, and then taking advantage of their necessity to exact terms which obliterate their individual freedom and place them for a life-time at the mercy of the man who buys them. It is true the evil is not all on the woman's side; nature revenges injustice by giving man oftentimes but a barren empire over the person, while the heart that he seeks is beyond his reach. And it is true also, that the better nature of both parties often conceals the odious features of the contract under an affection which produces happiness in marriage. But the marriage institution itself, view it as we may, remains a one-sided, usurious transaction, extorted by man's strength out of woman's necessities.

"If men could lay aside for a moment tradition, ancient usage, and, above all, the selfishness which makes right of might, and look at their duty to women in the clear light of the golden rule, they would see a better way than to shut up their sisters to the hard alternatives which society now makes for them. A truly noble and generous man would desire to say to woman, You shall at least be free; you shall stand fair and equal with me in opportunities of self-support. I disdain forcing you to dispose of yourself by the compulsion of necessity. Whatever alliance is between us shall be that of pure and spontaneous affection, unbribed and unfettered. In fact a chivalric mind in man would go further than this, and say to woman, I will offer you both love and support free from all conditions and stipulations, trusting to your affection and fidelity to reward my sex, if not me

individually. Such a compact, worthy of the spirit of Christianity, and which we may suppose regulates society in heaven, would be formularized thus:—

"Man *offers* woman LOVE AND SUPPORT (unconditional). Woman, enjoying freedom, self-respect, health, personal and mental competency, *gives* HERSELF to man in the boundless sincerity of an unselfish union. STATE—*communism.*"

Again, under the caption of "CIVILIZATION AND COMMUNISM" they present some quaint views on social matters, which will be interesting to those who are thinking of or laboring for social reform. The literature of these people whether correct or not is suggestive, and inasmuch as the time has arrived when thoughtful attention should be given to the improvement of the social and moral condition of mankind, I feel confident that the excerpts I am making from their publications, will be followed by some good results.

"The definition of the word civilization," says the writer, "as we find it in Webster's Unabridged is—'the state of being civilized, refinement, culture.' While this definition may be sufficient for the ordinary purpose of a dictionary, it is manifest that the distinction between the conditions of savage and civilized man, is susceptible of a much more thorough explanation. The leading characteristic of savages is their mutual independence and distrust; that of civilized people is their mutual dependence and trust. It occurs to me in passing, that the words trust and distrust are synonymous with faith and unbelief. It follows then that faith and unbelief are characterizing elements of civilization and barbarism.

"By way of demonstration of this proposition, we need only to consider the wants of the two classes, and the different means by which they are supplied. The wants of the savage are few, simply because his means of supplying them are so limited. He satisfies the cravings of hunger by his own right arm, and an appeal to nature's most obvious and direct means of supply, which is the wild game, fish, and fruits which his native forests and waters produce. He finds ready woven clothing covering the bear, the deer, the buffalo, and furred animals, which he appropriates to his own use. He approaches as near as possible to our ideal of independence, because his few wants are supplied by his own efforts, without an appeal to his fellow-men for help in the operation. Nevertheless, so far as he is dependent on his relations to his family or tribe, or on his traditions for wisdom and skill in procuring the supply of all his wants, just so far his life and nature partake of the characteristics of civilization. An utterly savage man, is an utter impossibility, unless a specimen can be discovered that was never, in any sense dependent on his fellow-man for the supply of any of his wants.

"In civilized society, on the contrary, human wants are numerous, because they have been fostered by an abundant supply. This abundant supply is the result of that faith in, and dependence on each other, which characterize civilization. In the place of the few, timid, wild animals of the forest, affording an uncertain sustenance to the sparse population of savage men, we have the 'cattle upon a thousand hills,' yielding of their abundance to their numerous and wealthy owners. Instead of such a scarcity of fruit that the Indian could picture the glories of his heaven in no more luxurious way than by representing it as pre-eminently a land of strawberries, we have single acres that yield their hundreds of bushels of that delicious fruit. In the place of the scant clothing stripped from the backs of the wild denizens of the forest, we have whole villages devoted to the fabrication of cotton, woolen, and silk material for human apparel.

"All these, and much more of the good fruits of civilization, we say, are the result of mutual faith or trust, which is the characterizing element of civilization. By way of illustrating the method by which this faith manifests itself, let it be supposed that I devote my whole time and attention to raising strawberries. How is it that I can afford to give the whole of my business attention to cultivating that single production? What security have I, that my manifold other wants, such as the demand for food, clothing, shelter, means of traveling, books, etc., will be supplied, if I give all my energies to this single branch of business? The answer to these questions is, that I have secure faith or trust—so deeply rooted that I am quite unconscious of it—that my neighbors will furnish the means of supplying all these wants; and therefore I may safely give my whole time and talents to the work of raising strawberries. I am thus at liberty to improve the business so as to produce the largest quantity and finest quality. My temporal prosperity in all things, is measured by my success in this one thing. Indeed Christ's terse, and condensed summing up of his gospel, 'Seek ye first the kingdom of God and his righteousness, and all things shall be added unto you,' might most appropriately be paraphrased into a summary of true business doctrine thus: Seek ye first the perfection and abundance of your own productions, and all other good things shall be added unto you.

"Thus we demonstrate that civilization is the fruit of faith. The producer *believes* that he shall have a sure market for his productions. He *believes* also that his neighbors, or in other words society, will supply his manifold wants. Therefore he presses forward in the work of the greatest and most perfect production with the full assurance of faith and the highest encouragement. He gets his reward by serving his neighbors. The savage lacks this faith in society, and believes only in his own right arm and its power to secure the food that he can find by hunting. The civilized

man, when he goes abroad on a hunt for a livelihood, searches not directly for the food and clothing that he wants, but he searches for a want in society and for the means of supplying that want, well knowing that for such work he shall not fail of his reward.

"The grand results of this faith are, 1st, a division of labor in its thousand-fold branches, assigning individuals to each branch; 2d, a system of exchange or commerce whereby each partakes of the fruit of his neighbors' toil; 3d, a multiplication of human wants, with abundant production of the means of their supply.

"Finally we may say that civilization, so far as it has a foothold in the world, is nothing less than the glorious state of things which Paul ascribes to the church of Christ, and which he illustrates by the perfect unity, combined with diversity of gifts, in the members of the human body, which is the very image of God. Civilization considered by itself, pure and simple, is a beautiful, a glorious thing. The injustice, the oppression, and all the foul abominations that haunt modern society, are the result, not of a spirit of civilization, but of the lack of it. We may say that a little civilization is a dangerous thing, in the same sense that we say that a little knowledge is a dangerous thing. It gives power to individuals and corporations, which wielded by a savage spirit, produces enormous evil. The history of the world has thus far been simply that of the power of civilization on the one hand, invading and overcoming barbarism on the other. In the crash of the conflict we can form no just estimate of the glorious results that civilization is capable of when she shall have fairly conquered her heritage.

"It has been shown in the foregoing that civilized society is distinguished, first, by its division of the work of production into an almost infinite number of branches, with individuals separately assigned to each; and secondly, by the establishment of a system of commerce whereby each may enjoy the fruit of his neighbors' industry. We have shown also that this state of things is founded on mutual trust or confidence, and that it results in an interweaving of interests and a grand unity which are unattainable in the savage condition of mankind.

"If this analysis of the elements of civilization is correct, it follows that we have a good test for determining the character of the various forms of society, the institutions, manners, and customs that we observe around us. By it we may compare and ascertain in a measure whether they partake more of the character of civilization or its opposite.

"How is it in regard to the prevailing system of holding private property? Of which element does this system partake the most—that of civilization, or that of barbarism? We say that the essence of civilization consists in the working of that mutual faith or confidence which enables an individual to trust others for the supply of his multifarious wants, while he gives his

undivided attention to some single branch of production for the supply of his neighbors' wants. Well, is this hoarding up of property for the use of one individual, or of the small circle of individuals comprised in a family, a manifestation of this faith or trust? Far from it. It is rather a manifestation of distrust, the same in kind with that which actuates the savage who lives almost independently of his neighbors. True, a business man ought to have the handling of all the capital that is needful to keep his business in a thriving condition, and for the supply of all necessary personal wants; but so far as the system of private-property holding gives the individual power to hoard up and sequester property for his own pleasure, withdrawing it from its legitimate use as capital, we insist that it is a relic of barbarism, and directly opposed to the civilization that characterizes this age.

"We might go further, and apply the characteristic test of civilization to the marriage system. A certain theological professor once said to his pupils, 'Follow the truth, if it takes your heads off.' If we were to follow his advice in the present instance, we should, by the guidance of this test, reason as follows: All men have social wants. The unmarried part of man and woman kind have a certain degree of liberty to put forward their social powers and susceptibilities into circulation, producing a sort of general interweaving of social ties not unlike that of the business world. This complex geniality and unity we aver to be a faint shadowing of the state in heaven, where they neither marry nor are given in marriage. But what is it when a man uses his powers of attraction as an Indian uses his bow and arrows, and goes forth to capture or captivate a woman that he may take her home to be his exclusive property henceforth, to supply his social wants alone? Is this an act that is characteristic of civilization as we have defined it? Does this act indicate trust or faith in society that it will supply all legitimate social wants? Is it not rather a manifestation of Indian self-dependence and lack of trust? Is it not a hoarding up of social capital, sequestering it from its legitimate use in a manner that is essentially the same as that in which men hoard up business capital? Putting out of the account all those softening influences that civilization has thrown around it, and the divine sanction it has had during an immature social state, our verdict is, that marriage is a relic of barbarism.

"This judgment of the private property and marriage systems is based on their *intrinsic nature* as tested by the rule which has been offered. If we examine the results or fruits of these two elements of modern society, involving as they do the separate household, we shall come to the same conclusion. We shall find that the fruits are very different from those which belong to civilization.

"One of the most manifest blessings of civilization is, the freedom from care that it affords the individual by means of its division of labor. The

private-property system interferes with, and limits this arrangement, by imposing upon every one the duty of a watch-dog over his own little pile. True, he may hire a lawyer to be his watch-dog; but it is rather expensive, and there still remains the necessity for watching the dog.

"Again it is the appropriate work of civilization, to supply the individual's every want in the most economical manner, and therefore on the largest scale consistent with the exigencies of business. But the institution of the little separate household, steps in and limits this work at a certain point, declaring that civilization shall go no further than to furnish material more or less elaborated for human use, and that the finishing touches of this work must be performed by means of the expensive, wearing, monotonous, and, we might add, Indian and uncivilized methods, which necessarily pertain, in a greater or lesser degree to the isolated household.

"For another thing, the motives for industry that are held out to man under the private-property system, are of the lowest and coarsest kind. We have already shown that this is true of the savage condition. 'Root, hog, or die,' says barbarous society to its members. 'Roof, hog, or die,' echoes the private-property system. It may be objected to this view of the matter, that it is an inexorable law of our being that applies as well to civilized as to savage society, that if any would not work neither should he eat. We subscribe heartily to that doctrine, but at the same time hold that there are many motives for industry that are infinitely higher than that of merely getting a living. We maintain that in a true state of heart-civilization, these higher motives could be more successfully appealed to, and that this rule of the private-property system, which appeals so constantly to the lower motive, may be classed with the law spoken of in Scripture, which is made for the lawless and disobedient. One of the evil fruits of this constant appeal to the lower motive for activity is, that it leads people to regard all labor as a curse, and a state of plethoric sloth as the highest earthly heaven.

"'But,' says an objector, 'supposing that we were to admit, for the sake of the argument, that the institutions of private property and marriage are relics of barbarism. Pray tell us how you propose to change things for the better? What is your higher cultivation, and how will you introduce it? Do you propose to banish the private-property and marriage systems at once, because they are barbarous institutions? A pretty mess you would make of it!'

"No, Mr. Objector, I don't propose to do any such thing. It is rather too large a job for me or any one man to undertake. Indeed it appears to be a work of such magnitude as to be worthy of no less a power than that of the Almighty himself to take the control of. And this thought suggests the idea that he may have particularly directed the advance of civilization

in the past, and that we might profitably study the work that he has already done, with a view to discovering *his plan* in regard to it and to forming some estimate of what we might reasonably expect in the future. Patrick Henry said, 'that he knew of no means of judging the future but by the past.' Though we may not all of us subscribe to that doctrine in its fullest extent, yet it is generally admitted to be a pretty safe way of reasoning. We may perhaps in another paper take up and discuss the methods by which civilization has progressed in the past, with a view to discover how we might reasonably expect that it will ultimately displace these barbarous institutions that we have been considering."

One would almost imagine that he would have to go out of the world to find such people as the Oneida Community; and finding them right among us, even those who may not approve of their theology and social practices, may reasonably be expected to have curiosity enough to ask many questions about them, answers to which may perhaps be found in the foregoing matter, if carefully perused. If not, application can be made to them direct, for I believe they stand ready to answer the interrogatories of all sincere inquirers.

The other departure from our Monogamic system of marriage referred to in the introduction of this matter will next be presented.

Fig. 170.

JOSEPH SMITH, THE PROPHET.

In Utah, which used to be the land afar off, but which the Pacific Railroad has placed nearly at our doors, we find Polygamy, of what is claimed a *Christian type*. A man by the inevitable name of Smith was born five years after the opening of the present century, who, during his boyhood, had many

visions, and soon after emerging from his "teens," was directed by an angel of the Lord to a place where he found some gold plates bearing an unintelligible record. But apples never grew without hands to pick them, and beautiful landscapes were never made without eyes to see them. Fortunately for Smith, a pair of gold spectacles were found in the same earth, with which he could read all the gold plates had to say, and the stones of these spectacles were called the "Urim and Thummim;" the characters on the plates were "Reformed Egyptian," but sitting behind a screen where no one could see him and with the aid of the aforesaid spectacles, Joseph, surnamed Smith, was able to read and interpret them, while a man outside the screen took down all that Joseph read to him.

The manuscripts were printed in 1830, making a volume of several hundred pages, and this publication was straightway called the "Book of Mormon," and by some the "Golden Bible." This work now consists of sixteen distinct books, professing to have been written at different periods by successive prophets.

The Mormon Church was first organized in the State of New York, but soon after removed to Kirtland, Ohio, where an immense temple was built. Here Smith was joined by Brigham Young and several others, who have become prominent in the Mormon Church. Pecuniary disasters finally drove them from Ohio to Missouri, and the incensed people of the latter State made such war upon them that they were expelled from its borders. Their next foothold became more permanent. They built another costly temple at Nauvoo, Illinois, and finally a considerable city; and Smith the Great was not only the prophet of the church, but the mayor of Nauvoo. Polygamy had not been thought of however until about 1838, when Smith "persuaded several women to cohabit with him, calling them his spiritual wives." This occasioned a matrimonial rumpus in Smith's family, for his legal wife was made jealous by the conduct of the prophet; but the family fracas ended by the complete surrender of the incensed wife, who, "to pacify her Smith, received in the summer of 1843 a revelation authorizing polygamy." The church first disputed this, and proclaimed itself opposed to polygamy, but ten years later it openly accepted the revelation and defended the new order of things. There was however a large number of dissenters, between whom and the prophet there arose a sharp conflict, resulting in the death of Smith by a bullet from a mob. Finally Nauvoo was cannonaded for three days, and all the Mormons were driven out. In the autumn of 1848 Brigham Young, who succeeded Smith as prophet and leader, found himself surrounded by the faithful at Salt Lake, Utah, where the church has flourished and received accessions till it numbers in Utah, at this writing, one hundred thousand members. For the facts from which I have made up the foregoing brief narrative of the Mormons up to the time of their settlement

in Utah, I am indebted to the New American Cyclopedia. The subjoined information with all the quotations are derived from an interesting book by William Hepworth Dixon, recently published and entitled "New America." Mr. Dixon was hospitably received by the "saints," and consequently enjoyed unusual opportunities to observe the domestic life of these strange people.

"'Look around you,' said Young to me, 'if you want to know what kind of people we are. Nineteen years ago this valley was a desert, growing nothing but the wild sage and the dwarfed sunflowers; we who came into it brought nothing with us but a few oxen and wagons and a bag of seeds and roots; the people who came after us, many of them weavers and artisans brought nothing, not a cent, not even skill and usage of the soil; and when you look from this balcony you can see what we have made of it.'

"These people are gathered from all quarters of the world, for when Young wants a 'missionary,' he picks his man whether he finds him in the street, workshop, or field, and dispatches him at once with an empty purse into the Gentile world to preach the Mormon gospel; the saints boast that when they go out to convert the Gentiles they carry with them no purse, no scrip; that they go forth naked and alone, to do the Lord's work in the Lord's way; trusting in no arm of flesh, in no power of gold, taking no thought of what they shall eat and where they shall lie down; but put their lives and fortune wholly in the hands of God. Thus these enthusiastic missionaries have started out for Liverpool, Damascus, Delhi, and Pekin, and reach those localities, too, by resorting to all sorts of labor on the way. At Utah to the craftsman they promise mills; to the peasant, farms. The heaven of which they tell is not placed wholly beyond the grave; earth itself is, in their opinion, a part of heaven; and as the earth and all that is in it are the Lord's, they announce that these riches of the earth are the true inheritance of his saints."

On their arrival the new converts are in reality taken care of. "A bishop's main function is to see that no man in his ward or in his county, is in want of food and raiment; in the Lord's name he takes from the prosperous what is necessary 'for the needy, for the whole earth is the Lord's.' There is also a tithing office which extracts from the rich a reasonable share of their revenue, whether of money or produce, and at this place the poor may obtain succor; the wants of the poor take precedence of the wants of the church. A special fund is raised for the relief of necessitous saints, and Young himself, the servant of all, discharges in person the troublesome duties of this trust."

Labor is provided for all; Mr. Dixon visited a meeting of the bishops called for the purpose of attending to the welfare of a fresh lot of Mormons from the Gentile world. "The old men," he says, "gathered in a ring;

and Edward Hunter, their presiding bishop, questioned each and all as to the work going on in his ward, the building, painting, draining, gardening; also as to what this man needed and that man needed in the way of help. An emigrant train had just come in, and the bishops had to put six hundred persons in the way of growing their cabbages and building their homes. One bishop said he could take five bricklayers, another two carpenters, a third a tinman, a fourth seven or eight farm servants, and so on through the whole bench. In a few minutes, I saw that two hundred of these poor emigrants had been placed in the way of earning their daily bread. 'This,' said Young with a sly little smile, 'is one of the labors of our bishops.' I confess," says Dixon, "I could not see much harm in it.

"The saints, as a rule, are not poor, in the sense in which the Irish are poor; not needy as a race, a body, and a church; indeed for a new society starting with nothing, and having its fortunes to make by labor, they are rich. Utah is sprinkled with farms and gardens; the hill-sides are pictured with flocks and herds and the capital city, the New Jerusalem, is finely laid out and nobly built. Every man labors with his hand and brain; the people are frugal; their fields cost them nothing; and the wealth created by their industry is great. To multiply flocks and herds, to lay up corn and wheat, is with them to obey the commands of God."

Women, as well as men do something. "Young's house," says Dixon, "is called the Bee-hive; in it no drone ever finds a place; for the prophet's wives are bound to support themselves by needle-craft, teaching, spinning, dyeing yarn, and preserving fruit. On men fall the heavier toils of the field, the ditch, and the hill-side, where they break the ground, dam up the river, fell the maple and the dwarf oak, pasture the cattle, and catch the wild horse. But the sexes take each their share of the common task, rearing houses, planting gardens, starting workshops, digging mines; each with a strain of energy and passion never found on the eastern slopes of this Wasatch Chain.

"The ministry is unprofessional and unpaid. Prophets, presidents, bishops, elders, all pursue their vocations in the city and on the soil." With all their industry, however, they take time for amusement and recreation. "The earth, according to the Mormon idea, is a paradise made for their enjoyment. Young may be described as a minister of mirth; having built a great theatre in which his daughters play comedies and interludes; having built a social hall in which the young of both sexes dance and sing; and having set the example of balls and music parties both in the open air and under private roofs. Concerts and operas are constantly being given. Water-parties, picnics, all the contrivances for innocent amusement, have his hearty sanction. Care is bestowed on the ripening of grapes, on the culture of peaches, on the cooking of food; so that an epicure may chance

to find in the New Jerusalem dainties that he would sigh for in Washington and New York."

The information which the reader has a right to look for in this place, however, is that which appertains to the marriage relation, and this I can gather better from Hepworth Dixon's book, than from any other source at my command. The "Mormon Church," he remarks, "puts marriage into the very front of man's duties on earth. 'Neither man nor woman,' says Young, 'can work out the will of God alone; that is, all human beings have a

Fig. 171.

BRIGHAM, THE PROPHET.

function to discharge on earth—the function of providing tabernacles of the flesh for immortal spirits now waiting to be born,—which cannot be discharged except through that union of the sexes implied in marriage.' To evade that function is, according to Young, to evade the most sacred of man's obligations. It is to commit sin. An unwedded man in Mormon belief is an imperfect creature; like a bird without wings, a body without soul. Nature is dual; to complete his organization a man must marry.

'Love,' says Young, 'is a yearning for a higher state of existence; and the passions properly understood are feeders of our spiritual life.'

"Instead of denying to their popes and priests the consolation of woman's love, they encourage them to indulge in a plurality of wives; and among their higher clergy,—the prophet, the apostles, and the bishops,—this indulgence is next to universal. Not to be a pluralist is not to be a good Mormon. They may also secure not only wives for earth but those for heaven. A strange peculiarity which the saints have intruded into the finer relations of husband and wife is that of continuity. Their right of sealing man and woman to each other, may be for either time or eternity: that is to say, the man may take the woman as his wife either for this world only, as we all do in the Christian church, or for this world during life and the next world after death. Thus the earth-wife of one man may be the spiritual wife of another. The right of choosing a celestial partner is not confined to the men however, for among these saints the female enjoys nearly the same power of selecting her celestial bridegroom, as the male enjoys of selecting his mortal bride.

"Another peculiarity," continues Dixon, "not less strange, which the Mormons have introduced into these delicate relations, is that of sealing a living person to the dead. The marriage for time is an affair of earth, and must be contracted between a living man and a living woman: but the marriage for eternity, being an affair of heaven, may be contracted, say these saints, with either the living or the dead, provided always that it be a real engagement of the persons, sanctioned by the Prophet, and solemnized in the proper form. In any case it must be a genuine union; a true marriage in the canonical sense, and according to the written law, not a platonic rite, an attachment of souls, which would bind the two parties together in a mystical bond only. This is done by the machinery of substitution. Substitution! Can there be such a thing in any marriage as either one man or one woman, standing in the place of another? Young has declared it! A woman may choose her own bridegroom of the skies, but like the man who would take a second wife, the woman who desires to marry a dead husband, can do it in no other way than on Young's intercession, and by his consent. By a religious act he can seal her to the dead man, whom she has chosen to be her own lord and king in heaven; by the same act he can give her a substitute on earth from among his elders and apostles; should her beauty tempt his eye, he may accept for himself the office of proxy for her departed saint. In the tabernacle," says Dixon, "I have been shown two ladies who are sealed to Young by proxy as the wives of Joseph: the prophet himself tells me there are many more; and of these two I can testify that their relations to him are the same as those of any other mortal wives. They are the mothers of children who bear his name."

"In the Mormon church, polygamy is not a right of man, but a gift of God. A saint may wed one woman without seeking leave from his prophet; that privilege may be considered one of his rights as a man; but beyond this limit he can never go except by permission of his spiritual chief. In every case of taking a second wife a special warrant is required from heaven, which Young alone has a right to ask. If Young says Yea, the marriage may take place; if he says Nay, there is no appeal from his spoken word.

"Every priest of the higher grades in Salt Lake Valley has a plural household, the number of his mates varying with the wealth and character of the elder. No apostle has less than three wives. Of the marriages of Brigham Young, Heber Kimball, and Daniel Wells, the three members of what is here called the first presidency, no accounts are kept in the public office. It is the fashion of every pious old lady in this community, who may have lost her husband by death, to implore the bishop of her ward to take measures for getting her sealed to one of these three presidents. Young is of course the favorite of such widows, and it is said that he never makes a journey from the Bee-hive without being called upon to indulge one of these poor creatures in her wish. Hence a great many women hold the nominal rank of his wife whom he has scarcely ever seen, and with whom he has never held the relations of a husband as we should understand the term. The actual wives of Brigham Young, the women who live in his houses, in the Bee-hive, in the Lion house, in the White Cottage (who are the mothers of his children), are twelve, or about twelve in number.

"The saints," remarks Mr. Dixon, "go much beyond Abraham; and I for one am inclined to think that they have found their type of domestic life in the Indian's wigwam, rather than in the patriarch's tent. Like the Ute, a Mormon may have as many wives as he can feed; like the Mandan he may marry three or four sisters, an aunt and her niece, a mother and her children. Perhaps it would not be too much to say that in the Mormon code there is no such crime as incest, and that a man is practically free to woo and wed any woman who may take his eye."

When men "are married so much," as "Artemus" used to say, there are of course large households of children. Young told Mr. Dixon he had forty-eight now alive. "Every house seemed full; wherever we saw a woman she was nursing; and every house we entered two or three infants in arms were shown us. That valley is indeed the true baby land. One merchant was unable to tell how many children he had. Could not quite remember!" It seems that some of the Mormons have their wives and children all under one roof while others keep them in separate cottages. When this is the case they may dine at one table. Every man arranges his household to suit himself, so long as he maintains the peace of his family.

Mr. Dixon was convinced that polygamy was not popular with the female saints. "Besides," says he, "what I have seen and heard from Mormon wives, themselves living in polygamous families, I have talked, alone, and freely, with eight or nine different girls, all of whom have lived at Salt Lake for two or three years. They are undoubted Mormons, who have made many sacrifices for their religion, but after seeing the family life of their fellow-saints, they have one and all become firmly hostile to polygamy. Two or three of these girls are pretty, and might have been married in a month. They have been courted very much, and one of them has received no less than seven offers." This statement verifies what I say in another place in regard to polygamy not being indigenous to our soil, and for which reason there is no occasion for alarm if all are allowed polygamous households who want them, and can find women lonely, dependent, or silly enough to become members of it. Mr. Dixon remarks, that a few of the female saints talk and write differently from those referred to above, and he says that the elders, if you listen to them, would make you believe that "a plurality of wives excites in the female breast the wildest fanaticism."

After a pretty thorough, and, it would seem, impartial criticism, however, Mr. Dixon paid them the following very flattering compliment. "Among the Mormon presidents and apostles, we have not seen one face on which liar and hypocrite were written. Though we daily meet with fanatics, we have not seen a single man whom we can call a rogue." Doubtless, then, Mr. Dixon attributes the assertions of the elders that the women strongly embrace polygamy, to fanaticism and self-deception, instead of willful falsehood. Their doctrinal notes are stated by Dixon as follows:—

"1. God is a person with the form and flesh of man.

"2. Man is a part of the substance of God, and will himself become a god.

"3. Man is not created by God, but existed from all eternity.

"4. Man is not born in sin, and is not accountable for offences other than his own.

"5. The earth is a colony of embodied spirits, one of many such settlements in space.

"6. God is President of the immortals, having under him four orders of beings: (1), Gods—that is to say, immortal beings, possessed of a perfect organization of soul and body; being the final state of men who have lived on earth in perfect obedience to the law; (2), Angels—immortal beings, who have lived on earth in imperfect obedience to the law; (3), Men—immortal beings, in whom a living soul is united with a human body; (4), Spirits—immortal beings still waiting to receive their tabernacle of flesh.

"7. Man, being one of the race of gods, became eligible, by means of

marriage, for a celestial throne; his household of wives and children being his kingdom, not on earth only, but in heaven.

"8. The Kingdom of God has been again founded on the earth; the time has come for the saints to take possession of their own; but by virtue, not by violence; by industry, not by force."

The Mormons are fashionable, at least, in their matrimonial regulations; for, as remarked in another place, it is claimed by an authoritative writer that polygamy is tolerated by the laws and usages of four-fifths of the human race, and the facts given in this chapter are not such as to disprove his assertion. Divorces among the Mormons I believe are never granted without the consent of the church.

MUCH SPACE has been allotted in this chapter to facts appertaining to the Communists and Mormons; but I feel confident that the matter will be perused with interest. Indeed, all of the marriage and social customs of the great variety of people alluded to in the foregoing essays, will attract the attention of all who are interested in the study of human nature, and in the "reconstruction" of society upon a basis which shall be the best adapted to secure the comfort, peace, happiness, and moral progress of every individual member, according to his taste and moral and physical needs; for while no two were ever constituted alike, the diversity acquires still more marked significance in distinct communities, so much so that nothing is more impossible than an attempt to reconcile all to one sect in religion, or to one kind of family organization. The mental digestion of the facts herein presented regarding the customs of all sorts of people living upon our planet, and who will soon become our next-door neighbors by means of railroads and telegraphs, must give rise to a variety of reflections in the minds of thoughtful readers; and if only those which find utterance could be caught by the quick hand of the phonographer, transcribed on paper, set up in type, and passed through the grim press of the printer, a valuable contribution would be added to our social literature, one which would be felt in our social matters as much as the ballot is in our political affairs.

Half-a-dozen random thoughts occurring to my own mind I will append here. Adultery is seldom spoken of as sin except when perpetrated by a woman. In nearly all countries and under nearly all social systems marriage is not the union of two congenial persons, drawn together by force of attraction, but it is a contract arranged by parents or other disinterested parties, or mainly managed in such a way that the parties most interested are not free to act for themselves; it is also an association often brought about by financial, pecuniary, or other considerations foreign entirely to those appertaining to mental, physical, and magnetic adaptation. The conduct of woman in nearly every thing is under the surveillance of man, so

much so, that one would suppose the Almighty had issued a decree, that man should be held responsible for the actions of both sexes, and that he would at the judgment-seat be held to answer for all the sins of women. (It is due to justice that he should answer for some of them.) Men and women are seldom joined together by God, or consistently with physiological law, which is God's law; consequently there is little danger of man's putting asunder what God has joined together. It is doubtful if a case of this kind ever occurred, in this or any other country, in any age of the world. We see that freedom of affection, and even sexual promiscuity, do not necessarily degrade or demoralize woman or generate diseases, as illustrated by the easy-going Japanese, and the Oneida Community. In monogamic society these liberties when taken, degrade and demoralize woman, because they debar her from association with the virtuous and the respectable; and they cause diseases, because in prostitution, at least, cohabitation takes place for a pecuniary consideration and greed of gain, inducing the most unnatural excesses, attended finally with dissipation, personal neglect, and disgust for one's self. The flesh and the spirit, both, may be said to be scourged. The Mormons boast that there is no such thing as prostitution at Utah, but polygamy alone is not sufficient to prevent prostitution. There were harlots in the days of the patriarchs, and we find that this class of women is common in various oriental countries where polygamy is practised. The non-existence of prostitution among the Mormons is undoubtedly due to two facts: First, no more women as yet flock to their territory than are wanted as wives. Second, the church so assists the poor Mormons that all the men have one or more wives, and indigent women are so well taken care of, that necessity in no case drives them to a life of shame. With these somewhat disjointed items thrown together in one paragraph, I will bring this chapter to a close.

CHAPTER V.

DEFECTS IN MARRIAGE SYSTEMS.

THE author has no desire to arouse the prejudices of the public, and would gladly leave the task he is about to undertake in this chapter to abler heads and stronger hands. But some one must undertake the unpopular work of exhibiting the defects of the old marriage-systems, and of awakening the inventive ingenuity of the age to the discovery of new rules and customs for the regulation of intercourse between the sexes; for we are now rapidly drifting into the vicious manners and practices of the Grecians in the days of Pericles, without adopting their virtue, frankness, and honesty. Paris, London, and New York, are worse in their sexual morality to-day than were the people of ancient Athens, for the reason that while the practices of their citizens are no better, their professions *are*, and the souls of husbands and wives are weighed down with deceit and hypocrisy.

While science and art are performing what in other days would have been regarded as miracles, in nearly all departments of life, the marriage systems of the world are just about what they were fully 500 B. C., and not so perfect, in fact, as that one which was inaugurated in the early history of the republic of Rome, when law had nothing to do with the marriage relation. Why is this? I need hardly tell the intelligent reader It has somehow gotten into the heads of the people, that marriage is a divine institution, and consequently must not be meddled with. It is supposed by many unacquainted with the domestic history of the ancients, that our Saviour was the originator of our monogamic system of marriage. This error must be dispelled by a persual of the History of Marriage given in this volume. The monogamic system was more strictly adhered to by the Romans two thousand five hundred years ago, and by the northern barbarians of Europe long before Christian teachers were admitted among them, than it has been by any peoples in Christendom.

For want of time and space, I must beg to be excused from any lengthy theological discussion of this subject. The adage "when doctors disagree," etc., is eminently applicable here. Still, I will not altogether dodge it.

Is marriage a divine institution? If so, which of the various forms presented in the preceding chapter? Besides the Monogamic system, originated by the ancient Romans, 700 or 1000 B. C., and the Polygamic, which came down to us with the indorsement of Abraham, Moses, and the prophets, at least one new system has sprung up which claims to be Christian—"Complex Marriage." Jesus of Nazareth did not marry, St. Paul was an old bachelor and decried marriage. We have seen what St. Jerome, one of the early Christian translators has said of it, calling it a tree that should be cut at the root, and we also find that the early Christian church regarded it simply as a "necessary evil," which should be disposed of as soon as practicable. Lastly, we have to-day five different sects, claiming to be Christian, wherein we find one prohibiting the marriage of the clergy (the Catholics); another holding to the Monogamic system for the clergy as well as the laity (the great body of Protestant Christians); another which believes that all the popular systems of marriage encourage selfishness and vice, and present for a remedy what they call the Complex System, or what the outside world would call no marriage at all (the Communists); another which claims that Polygamy is the true relation, and that he who can present the most dazzling array of wives and children will be the greatest in the kingdom of Heaven (the Mormons under Brigham Young); and finally, a sect which believes all sexual association, even for the purpose of procreation, sinful, marriage a sort of compromise with the devil, etc. (the Shakers). All these sects prove (or they think they do) the correctness of their position by the Old and New Testaments. But Christ did not command men to marry, or not to marry. When questioned, he simply answered in a way to give people to understand that they should live up faithfully to their contracts. With his pure nature, he could not counsel fraud or a course of action calculated to lead to deception and violation of promises solemnly given. No one doubts that truth is divine, that every thing which partakes of deception, unfaithfulness, and fraud, has its origin in evil; consequently, when we voluntarily surrender certain individual liberties, with the understanding that the one with whom we make this contract shall do the same, any clandestine or open violation of the agreement is perfidy. Impressed with the conviction, that in this violation of good faith, women were "more often sinned against than sinning," our Saviour, when the woman was brought to him charged with adultery said,—"He that is without sin among you, let him first cast a stone at her." He did not cruelly upbraid her, and make her feel that she had committed an unpardonable sin, one which merited the sneers of men and the reproaches of women. It is with a compound mixture of sadness, mirth, and contempt for hypocrisy, that one pictures in his imagination those men, rank with matrimonial perfidy, creeping out of the pure presence of Jesus of Nazareth, and away from a sorrowful woman who could

not have committed the offence with which she was accused, without the aid of some man, every whit as good as they were, perhaps better, creeping out with bowed heads and crouching bodies, dropping hats and tumbling one over another! For be it remembered, when he looked up he found they had all run away!

What evidence is there that any form of marriage has so received the Divine sanction, that it cannot be regulated, or changed if necessary, to promote the health and happiness of mankind! In the early history of marriage we find that a man simply *took* to himself a wife; no ceremony or public demonstration marked the event. In course of time, as if to make a *woman* feel the responsibility of her new position, and incite her to fidelity, the "taking" was celebrated by feasts. Finally, when a wife began to cost something, these festivities were mixed with more or less of the religious elements of those times, so that *woman* more than ever should realize the sacred obligation she had assumed. Time rolled on, and women doubtless would continue, in a slight measure, to imitate the infidelity of their husbands, so that the ancient Romans inaugurated the custom of employing priests to solemnize the nuptial ceremony. "We first find," says Norton, "priests performing the nuptial ceremony among the ancient Romans, and as the Christian religion was early introduced into Rome, from the pagan priests the Christian clergy, perhaps, borrowed the custom of celebrating marriages also. Soter, the fifteenth bishop, who occupied the chair of Saint Peter, from 168 to 176, was the first to make it obligatory upon the church-people to be married by a priest." The next step we find our sex taking to impress upon *woman* the sanctity of the institution, was the performance of the ceremony at the door of the church. Undoubtedly they would have chosen to go in, and make the ceremony altogether a religious one, had they not felt a little hesitation about so far committing themselves to the compact of marriage. On the church steps they felt, perhaps, that they could make a little mental reservation without perjury. We find in Brande's Antiquities, "the custom of marrying at the church door extended down to modern nations. Chaucer in his 'Wife of Bath,' alludes to it as follows:—

'She was a worthy woman all her live,
Husbands at the church door had she five.'

Until 1599, the custom continued in France, and until the time of Edward VI. in England. Edward I. was married at the door of Canterbury Cathedral, September 9, 1299, to Margaret, sister of the king of France."

It did not take so long however as the latter date indicates, for the last opaque device of men, to become transparent to women. The former finally found that nothing would answer, but to enter in and make the obligation sacredly binding on men and women alike. According to Du Cange, marriage was first celebrated in the churches in 1226. "It is said," remarks an

essayist, "that Pope Innocent the III. was the first who ordained the celebration of marriage in the church, before which it was totally a civil contract, whence arose dispensations, licenses, and other remnants of papal benefit. Shelford thought it came with the Council of Trent. The Council sat within the Bishopric of Trent, Germany, from the year 1545 to 1563." Although there is a little disagreement as to the exact year, the statement that it originated with Pope Innocent the III. is in harmony with the testimony of Du Cange. So what began with custom, ended at a later time with a rule instituted by the pope, and by the church. History does not tell us just when our sex became so hardened that they could thus sacredly pledge their fidelity and then without compunction violate that pledge; consecrate the promise in holy places and then disregard the promise, but the fact is, a large body of our sex, as far back as we can look into the past, have done it, and are still doing it. Though the institution of marriage is not divine, I repeat, *Truth* is, and compacts so solemnly entered into, have all the sacredness of an oath made with the Bible at the lips. If this fact were more forcibly impressed upon the minds of the people, more men and women would be faithful to their marriage vows than are found to be now, under the doctrine that marriage is a divine institution. The professed Christian now-a-days, loses sight of his sacred vows, when the marriage ceremony is celebrated,—half believes there is some mistake about the institution being divine, and when he stumbles into temptation and yields to it, he consoles himself with reflections upon the universal fallibility of mankind, and a sublime trust in the "scheme of redemption." The man of the world, when tempted, in combating in his own mind the popular idea that the institution is divine, also overlooks altogether the sacredness of his promise to the one who becomes his wife, and however high-minded and honorable in his ordinary business transactions, does not for a moment accuse himself of rank dishonesty, when he violates the marriage compact.

There are, therefore, two very weighty reasons why the popular mind should be disabused of the erroneous impression that any present marriage institution is of divine origin. First, because this impression puts the religious world at war with all attempts on the part of philanthropic physiologists to improve the customs regulating the sexual association of men and women. Second, because common principles of honor are overshadowed by the prominence given to the supposed divinity of a prevailing marriage system, so much so as to be made invisible to thousands who regard their "word as good as their oath," and an oath too sacred to make perjury excusable under any circumstances.

If a tree is to be judged by its fruits, it is hardly less than blasphemous to attribute any marriage system yet invented to divine origin. Not one of

them is perfect enough in its nature and results to be attributed to the Divine Mind.

I will however pursue this question no further. Read the History of Marriage, and then when reading what Christ and the apostles said upon marriage and divorce, keep constantly in mind that it was mainly the exposition of the then existing Roman and Jewish laws regarding those matters; familiarity with those laws must lead to this conclusion in every intelligent mind. Adultery, however, being in nearly, if not all cases, a violation of good faith between the married couple, receives moral as well as legal condemnation in the New Testament.

Some one may good-naturedly whisper in my ear that—"what God has joined together man must not put asunder." I must laugh; it is too comical for any thing! Not the command, but the suggestion of it in this connection. How many in any age of the world has God joined together? In early times men used to buy their wives; in later times children were betrothed by their parents in some cases before they were born; in all ages parental prejudice, money, expediency, and all sorts of unnatural influences, have prevented God from joining men and women together according to physiological law, which is His law, and consequently these *joinings* have been mainly man's work—not God's. If you can show me in all Nature any analogous botch-work, I may recede from this position. The truth is, man has been constantly violating this very command, because he has practically put asunder, or at least kept asunder, those whom God fitted to make life's journey happily together. "The world," remarks a sensible writer, "is besotted with marriage, just as the South was by slavery; in fact, it is just as common to hear marriage called a divine institution here, as it was before the war to hear slavery called a divine institution in New Orleans!"

Demerits of Polygamy.

One of these, and perhaps the greatest is the inequality which must necessarily exist between the sexes living under this system. It makes a kind of a king of the man, and servile subjects of the women composing its household. Secondly, if polygamy were to be universally adopted, the female element would be monopolized by the rich, so that the poor would have to practise polyandry, and patronize prostitution, or do without women altogether. Such was the result in early ages when this system of marriage was almost, if not quite universal; and the same evil might occur again if this system were forced upon the civilized world. It possesses other demerits which are equally chargeable against monogamy, and these may be observed and applied by the reader while perusing the next essay. I will not consume space with their exposition here.

Demerits of Monogamy.

It looks like cruelty for one to strike his parent; the writer was born under the system of monogamy; how can he summon the courage and ingratitude to level a blow at this venerated institution? It is a painful task I must confess. So it is painful to tell a dear friend his faults, and it is still more harrowing to drag an erring father from the ditch, into which his inebriety has plunged him. But there are duties which we must discharge, if we would be manly and look heavenward for applause. It is with feelings such as these I must exhibit some of the evils of monogamy.

1st. It leads to either selfish idolatry or to selfish indifference; if not to these, then, what is worse, to matrimonial quarreling. The marriage of one man to one woman, if it indeed be a happy union, leads the wife to idolize her husband and the latter to idolize his wife. In all such unions the love is so exclusive that there is hardly a liking for good neighbors, and scarcely any love at all of God. The two are enrapt in mutual affection, and live mainly for themselves, and within themselves. They are blind to the woes of those around them, and though they may profess Christianity, they do not live consistently with its spirit. They are content to leave unfortunate people without their gates to the care of old maids and widows. Then if the wife of such a union is taken away, the other forgets the great work assigned him by his Maker, and hesitates not to tell his friends, he has nothing to live for, and would gladly be buried with her. If the husband be stricken down, the widow envelops her body in garments of black, secludes herself too long, perhaps forever, from her duties to the living, and though the one that is left may ultimately find consolation, he or she has failed to develop in the narrow atmosphere of the home, that broad generosity, which, when cultivated, places one in close sympathy with all the children of our Father. The beautiful, pathetic, and popular song, "Do they miss me at home," breathes a spirit of selfishness, self-love, and idolatry, that vibrates harmoniously in the atmosphere of such a household as this. It also accords with the popular sentiment of the times. I will quote one verse:—

> "Do they set me a chair near the table
> When ev'nine's home pleasures are nigh,
> When the candles are lit in the parlor
> And the stars in the calm azure sky?
> And when the good-nights are repeated
> And all lay them down to their sleep,
> Do they think of the absent, and waft me
> A whispered good-night while they weep?"

This is certainly delightful food for vanity, but is it the natural sentiment of generous and unalloyed affection? If we entertain for any one

unselfish affection, will we not be happier to know that that person is happy? Would it not make us feel miserable to suspect that that person is wretched, even though that wretchedness be caused by our absence? It is impossible for us to love any one truly, unselfishly, and generously, without feeling happier to know that that one is happy.

The foregoing pictures one of the idolatrous kind of marriages. If the union be of that milk-and-water kind which develops no attraction between the pair, you will almost invariably find them seeking separately individual pleasure, often at the cost of the happiness of others. Each one lives for him and herself, and having little true enjoyment at home, too much time is devoted to nursing the "blues," to reflections upon real or imaginary matrimonial ills, or the seeking of pleasure, not easily found, away from home. They seldom have contentment, and are consequently never in spirit prepared for the practical and humanitarian duties of life.

The union of incompatible natures leads to discord, and overlooking in this place the effect upon offspring, the bickerings of such a couple not only ruin their own dispositions, but often make themselves felt upon the peace of mind of their more fortunate neighbors. Everybody stands in awe of a matrimonial fracas! The cat on the hearth involuntarily raises her back in sympathy with the belligerents! Of course they feel under no moral constraint to be faithful to their marriage vow, yet, jealousy and idolatry sometimes spasmodically exist in this kind of mating. I recollect reading somewhere of one instance of a husband in New York during a religious revival becoming jealous of his wife's love for Christ, and so great was his insane rage he blasphemously exclaimed that he would avenge the wrong if he could get hold of him. But as he could not do this, he being a devil carnate, instead of incarnate, he turned his wife from his door forever!

2d. It practically leads to a disregard of Nature's institutes, on the part of a very large class, embracing children above the age of puberty, but under the age for marriage; men who cannot afford to marry; women who are not sought in marriage; husbands with infirm wives; wives with impotent husbands; widows and widowers. Perfect physical health and mental content and cheerfulness are not, nor can they be, possessed by those who do not live naturally. To live naturally, is not simply to eat and drink to a temperate extent, but in all respects to moderately indulge all the natural appetites. The rule of abstinence applied to any one of them is hurtful, and if, like many other violations of the laws of life, the injury is not sufficiently immediate to be traced to its true cause, depend upon it, it will nevertheless sometime make itself felt. It is our duty to guard equally against abstinence and excess, and if the latter be more prevalent in one sex, the former is no less so in the other, owing to the inequalities of our social regulations. For a more extended treatise on this subject read the

essay—"Influence of the Sexual Organs on Health," commencing on page 616.

One word more about widows: Under the monogamic system, a widow, unless left with property, is not only bowed down with grief in consequence of the loss of her husband, but her mind is overburdened with anxiety and care, because her staff is taken away from her. Society has made her a cipher without a man, and, by the death of one man, she is reduced to that cipher. If alone, and her strong masculine competitors will give her a chance, she may make out to earn her subsistence, but if trammeled with the care of a growing family, or if her hands are bound to the helpless body of an infant, her load is more than one poor mortal can carry, and many a heart like this has been crushed beneath the commercial juggernaut that rolls out, with only selfish hands to guide it, from the world's great marts. The river of her joys is frozen; its crust is broken; and as on the ice cake she floats down the stream of life, she encounters the spoken, more than the heart, sympathy of the world.

3d. It leads to selfishness. *My* wife—*my* husband—leads to *my* house—*my* children—and finally to *my* loaf of bread, and a beggar at the door. The man's interests are at that instant separated from those of his fellow-beings, and from the moment he assumes these relations, if husband and wife pull together—and they do in property manners usually—the main efforts of the two people are directed to filling their own laps at the expense, if necessary, of starving mouths around them, open like so many bills of hungry robins, and the scant crumbs that are dropped into these famishing lips, are not in any wise generous enough to enable these two people to creep under their sheets at night, with the happy consciousness of having complied with the golden rule. Nor can they be justly blamed for it. They must do as they do in self-defence. They are surrounded by separate families each working blindly for itself. The most generous people in the world grow less generous after marriage; this is axiomatic; and consequently, this relation, instead of enlarging the human soul, shrinks it away, and the old man looking out from under his time-whitened brows watches jealously the rising world about him lest all that he have be filched from his grasp, leaving him to die in indigency, or, it fail to descend undiminished to his posterity. Perhaps his children have formed matrimonial associations, and if so of course outside of the family, with divers families; then there is found a new crop of couples, each pair mainly engrossed with its own aggrandizement and happiness. Next usually follow the wars of mothers-in-law with their sons-in-law, etc., with the prospect of a grand family tempest for the spoils at the decease of the old people. Now, reader, is this picture overdrawn? Is it not the rule, rather than the exception? I wish you might prove me to be in error, but with all the pride of family,

universally entertained, leading people to conceal these disgraceful quarrels if possible, we encounter them everywhere. The records of probate courts and of surrogates teem with them.

4th. It interferes arbitrarily with woman's God-given right to maternity. Many women unsuited to become wives; many more who are never proffered marriage; still others—too few—who have declined the offers of those they could not love; childless widows, and the wives of sterile husbands, no matter how great may be their love of offspring, must, if the monogamic rule and the social custom it maintains be observed, go through life without once using the reproductive function with which their Creator has endowed them. Here man's rule conflicts glaringly with the edict our Great Ruler has indelibly stamped upon our very being; He has implanted within woman an irrepressible desire for offspring, but he has not befooled her, by keeping from her the organs which are capable of receiving a germ and developing a child. He has created man with organs capable of producing the necessary germ, and, if the story in Genesis is accepted, he commanded unreservedly men and women to increase and multiply. But the immoral spectacle presented to-day is,—many an unnatural or disappointed woman in marriage is destroying the baby in her womb, and many a high-minded woman, out of marriage, is almost distracted, because she cannot have at least one child. You men who are handling gold in Wall Street, and the thousands absorbed in the world's business, and you women whose unsympathetic hearts do not draw out the secrets of your wretched sisters, may question this; or, rather, while not unaware of the former, you may question the truth of the latter. But, friends, only yesterday a middle-aged woman in my presence, not a weak-minded one, nor yet what the world calls "strong minded," but an accomplished representative of her sex, wept in view of the fact that she might never have a child. Personally she was not incapable, at least there was no reason to think so, but as she had passed the marriageable age she was oppressed with the idea that she might go through life without once experiencing the happiness of becoming a mother. If this was the only case, I would not intrude this radical paragraph upon the attention of the reader. I have been told this by women passing or passed the usual age for matrimony many times, and some of them, approaching that age when maternity is impossible, have appeared almost frantic with disappointment and sorrow. I am personally acquainted with some who have had what the world would regard as attractive offers, and who dare not marry or do not care to, and yet feel that they can hardly endure the idea of going through life without at least one child to be a friend and companion—an earth-object to love in the cold, selfish world moving about them—when their parents shall be called away from earth. If so many cases of this kind come to the knowledge of the writer, and I

assure you most solemnly I am telling you the truth, how many thousands there must be in our country alone, how many millions in all Christendom, where monogamy is ostensibly the rule! The suffering heart is not apt to reveal so great a secret; it is only trusted to a friend who is known to possess a liberal and sympathetic mind: how many, then, of those who are moving among us may have this desire locked up securely in a swelling heart concealed from everybody; nay, if possible, hidden from themselves; and how many millions more rest beneath the sod, who in life entertained this same heaven-born passion, but died without the sympathy and gentle hands of children to soothe them in their expiring moments.

According to the *American Museum* of 1787, a woman by the name of Miss Polly Baker, was prosecuted before a court of judicature in the former staid old State of Connecticut for the *fifth* time for having illegitimate children, and it will be interesting in this connection to append her defence, as it is a document of no inconsiderable merit, and may be regarded as an admirable vindication of her natural right to bear children.

"May it please the honorable bench," remarked the heroic Miss Baker, "to indulge me in a few words. I am a poor, unhappy woman, who have no money to fee lawyers to plead for me, being hard put to it to get a tolerable living. I shall not trouble your Honors with long speeches, nor have I the presumption to expect that you may by any means be prevailed on to deviate in your sentence from law, in my favor. All that I humbly hope is that your Honors will charitably move the Governor's goodness in my behalf, that my fine may be remitted. This is the fifth time, gentlemen, that I have been dragged before your court on the same account: twice I have paid heavy fines, and twice have been brought to public punishment for want of money to pay these fines. This may have been agreeable to the laws, and I don't dispute it; but since laws are sometimes unreasonable in themselves, and therefore repealed, and others bear too hard on the subjects in particular cases, therefore there is left a power somewhere to dispense with the execution of them. I take the liberty to say that I think this law, by which I am punished, is both unreasonable in itself and particularly severe with regard to me, who have always lived an unoffending life in the neighborhood where I was born, and I defy my enemies (if I have any) to say I ever wronged man, woman, or child.

"Abstracted from the law, I cannot conceive (may it please your Honors) what the nature of my offence is. I have brought five fine children into the world, at the risk of my life. I have maintained them well by my own industry, without burdening the township, and would have done it better, if it had not been for the heavy charges and fines I have paid. Can it be a crime (in the nature of things, I mean) to add to the number of the king's subjects, in a new country that really wants people? I own it, I should

think it a praiseworthy, rather than a punishable action. I have debauched no other woman's husband, nor enticed any youth. These things I never was charged with; nor has any one the least cause of complaint against me; unless, perhaps, the Minister or Justice, because I have had children without being married, by which they have missed a wedding fee. But can this be a fault of mine?—I appeal to your Honors. You are pleased to allow I don't want sense; but I must be stupefied to the last degree, not to prefer the honorable state of wedlock, to the condition I have lived in. I always was, and still am, willing to enter into it; and doubt not my behaving well in it, having all the industry, fertility, and skill in economy, appertaining to a good wife's character. I defy any person to say I ever refused an offer of that sort. On the contrary, I readily consented to the only proposal of marriage that ever was made to me, which was when I was a virgin; but too easily confiding in the person's sincerity that made it, I unhappily lost my own honor, by trusting to his; for he got me with child, and then forsook me. That very person you all know; he is now become a magistrate of this county; and I had hopes that he would have appeared this day on the bench, and endeavored to moderate the court in my favor. Then I should have scorned to mention it; but I must now complain of it as unjust and unequal, that my betrayer and undoer, the first cause of all my faults and miscarriages (if they must be deemed such), should be advanced to honor and power in that government which punishes my misfortunes with stripes and infamy!

"I shall be told, 'tis like, that were there no assembly in this case, the precepts of religion are violated by my transgressions. If mine is a religious offence, leave it to religious punishments. You have already excluded me from the comforts of your church communion; is not that sufficient? You believe I have offended Heaven, and must suffer eternal fire; will not that be sufficient? What need is there, then, of your additional fines and whipping? I own, I do not think as you do; for if I thought what you call a sin was really such, I would not presumptuously commit it. But how can it be believed that Heaven is angry at my having children, when to the little done by me toward it, God has been pleased to add his divine skill and admirable workmanship in the formation of their bodies, and crowned it by furnishing them with rational and immortal souls?

"Forgive me, gentlemen, if I talk a little extravagantly on these matters. I am no divine; but if you, gentlemen, must be making laws, do not turn natural and useful actions into crimes, by your prohibitions. But take into your wise consideration the great and growing number of bachelors in the country; many of whom, from the mean fear of the expenses of a family, have never sincerely and honorably courted a woman in their lives; and by their manner of living, leave unproduced (which is little better than

murder) hundreds of their posterity to the thousandth generation. Is not this a greater offence against the public good than mine? Compel them, then, by law, either to marry or to pay double the fine of fornication every year. What shall poor young women do, whom custom hath forbid to solicit the men, and who cannot force themselves upon husbands, when the laws take no pains to provide them any—and yet severely punish them if they do their duty without them;—the duty of the first great command of Nature, and of Nature's God—increase and multiply!—a duty from the steady performance of which nothing has been able to deter me; but for its sake I have hazarded the loss of the public esteem, and have frequently endured public disgrace; and therefore ought, in my humble opinion instead of a whipping to have a statue erected to my memory."

It is said that this "judicious address influenced the court to dispense with her punishment, and induced one of the judges to marry her the next day;" and, adds the same account, "she ever afterward supported an irreproachable character and had fifteen children by her husband." A word or two more, and I will conclude what I have to say under the fourth criticism. It is, to say the least, terribly unjust to woman, that she may not resort to the only means God has provided for her to have children, for this praiseworthy purpose, when her heart is set upon offspring, while prostitution for men's amative gratification is actually licensed in many countries, tolerated with no effort to suppress it in nearly all large cities, and, too, when the masculine rake is not excluded from good society! To a woman who has no opportunity to marry wisely, a son would be of more value to her than to the woman who has a kind husband to be her companion, protector, and support, especially when custom forbids woman to go anywhere without a masculine attendant; and a daughter, if this must unfortunately for the latter be the sex of the child, would at least be a companion, which a married woman could more easily live without, than she whom the world contemptuously calls an old maid. This attraction might draw about her some society in her old age, which would make itself agreeable to her, if for no higher motive than the obtaining of her consent when the daughter's hand is sought in marriage.

5th. It often holds together for a life-time the parents of continually dying progeny! What? Yes; it keeps in the bonds of wedlock in a large number of instances persons of such similar physical temperaments, that their children die in the womb, in infancy, or in advanced childhood, and the mother is ever clad in weeds of mourning! Whenever you see parents, fruitful but childless, constantly bearing and as constantly losing children by death; when you see parents of whom it is said—they had a pretty family but they have lost them all—there is some *natural* reason why those husbands and wives should not remain together. Differently associated, they might become the

parents of viable children. Without the restraints of monogamic marriage, woman would not allow herself to become pregnant the second time by a man whose germ united with hers could produce only a short-lived child.

6th. It overlooks the daily demonstrated fact, that a married couple may *grow apart*. Marriage contracted under the most auspicious circumstances between an intelligent man and considerate woman, who do not act hastily or misjudge their adaptation to each other, may in one, five, ten, or at the outside twenty years, become a hateful yoke, which sours the temper, and perhaps ruins the character of one or both of them. Everybody admits there can be no true love where there is not respect. This being an admitted truth, look for a moment at how many ways this sense of respect may be justly forfeited. A girl possessing all the popular accomplishments, and, what are better, health and moral and intellectual grace, marries a young man of promise,—the favorite son of one of the "first families,"—himself a pattern of propriety, honesty, morality, may be religion—the pet of the neighborhood, and a prize for the lucky young woman who wins him. As he has never encountered great temptations, no one can tell whether this young man's good character is made of pewter or steel. It may be the veriest putty. As time rolls on he may become a victim to rum; if drink offers no temptation, he may become more devoted to tobacco than to his family; if neither of these vices tempt him, he may become an indolent, improvident husband; or, a coarse, profane man. That sweet disposition, under business perplexity, may prove to have been the cream of an easy life, which the lightest cares may change to buttermilk; nay, it is not impossible, as marked illustrations in domestic life demonstrate, that he may become heartless and cruel. Now, why should this young woman be doomed to stem life's current with this sinking companion? Reverse the picture, so far as it may be made to apply, and why with every quality to enable him to appreciate happy domestic life, should he be forever tied to the body of this shrew? One of the punishments of the middle ages was to tie the prisoner to the carcass of a dead animal, and there allow him to remain until he perished by the corrupt emanations of the decomposing animal. Do we not occasionally find in married life a victim, similarly situated to the subject upon whom the punishment just described was formerly inflicted.

Albeit, there is another kind of growing apart, which the world does not so much observe, or if it does it would not consider of sufficient importance to propose relief. A husband may possess a mind not satisfied to run in one rut, or to make no progress. He has a taste for science and the attainment of knowledge; she has not, and has no higher aspiration than to personally see to the immediate necessities of the family. Or, reverse the illustration. The man is satisfied to know only the driveling matters

appertaining to trade; if a farmer, he is satisfied to talk only of crops, cattle, and hens; if a merchant, only the rise and fall of the market, the quality of his merchandise and the length of his tape. The wife meanwhile aspires to learn all she can, not of novels, but of nature, and of works calculated to enrich the mind, and, in brief, of every source within her reach. She thinks, perhaps writes, for the edification of others. Now is it at all unnatural that the progressive companion should little by little lose respect for the belittling qualities of the other? Then can love exist with what finally develops into contempt, though the latter may not be unmixed with heartfelt pity? Just look how these people chafe each other continually. Can any good come of this domestic friction which chips away as fine as iron filings the good temper and better qualities each possess?

Another class still must be named here, which the world thinks made a mistake at the beginning. I refer to those whose temperaments change in some instances by accountable and in others unaccountable causes. I mean in their *physical* temperaments. As will be seen in various places in this volume, the writer considers temperamental adaptation essential to happiness in marriage. Nor is he alone in this opinion, for it has been and is entertained by some of the ablest physiologists that ever lived. No couple in entering marriage, can with proper regard to the law of adaptation, be *positively* certain that their temperaments will always remain just what they are. The encephalic temperament may be developed by study, or by other brain labor; the lymphatic may be induced by an easy and luxurious life, or by what is entirely without the control of the individual—inherited predisposition. Suppose a man occupied in a counting-room or in the labors of a profession, marries a young woman whose weight will not exceed one hundred pounds. The man's pursuits will have a tendency to develop the encephalic temperament; may quite possibly do so. Then supposing the young woman as she advances acquires the lymphatic development, reaching perhaps a weight of one hundred and fifty or possibly many more pounds. These two persons have practically grown apart, for the union of the encephalic with a lymphatic temperament, is incompatible, and so offensive to nature that a curse is pronounced upon it; the children of the violators of this physiological law shall die in their infancy or childhood! In this fact will often be found the secret of some parents losing their latter crop of children, while the first-born exhibit considerable vital tenacity. The same curse which rests upon these unfortunate people in child-bearing extends to their domestic enjoyments. In some cases temperamental growth apart, leads to personal aversion to each other.

A similar result is encountered when a person of lymphatic temperament marries a person of sanguine, or bilious temperament, if there be a hidden germ of one of the non-vital temperaments. At the outset the law

of adaptation has been properly observed; but supposing the hidden germ referred to develops, adding a decided lymphatic element, so that, in course of time, the two, to use a popular expression, become a "fat and jolly couple;" you shall usually find that the jolly is all on the outside, and that their internal life is not so smooth as their fully distended skins. Unless the bilious or sanguine is possessed by one or the other to a considerable degree, their incompatibility shall place its blighting fingers not only on their domestic bliss, but on their health, and on the life of their offspring. In the animal kingdom, below man, undoubtedly the same changes take place, so far as temperamental adaptability is concerned, but they instinctively change their mates—the birds, I believe, once a year, or, in other words, every time they are about to raise a family.

With this sixth criticism I will close my argument in the case. There are other faults our popular marriage-system presents which might be given, but the foregoing will suffice. There is also one which, in the present condition of society, may be suggested, but not urged. It may be stated for the mental digestion of good and intelligent people, but the time has not yet come when it may be safely pressed upon the great mass of mankind. In society where the monogamic marriage system prevails, the physician engaged in a national practice like mine, and who may be consulted by letter, or in person, by people who may never meet him again, and who would not intrust such secrets to home physicians, encounters swarms of impotent men, and a still greater number of sexually apathetic women. The causes of these infirmities may, in many instances, be ascribed to disease, bad habits, etc., which have been treated of in their proper places. But may not the cause, in many more, be ascribed to the generally recognized law—"*that variation of stimulus is necessary to preserve the tone and health of any organ of sense, and that prolonged application of the same stimulus exhausts it?*" And further, may not matrimonial infidelity, instances of which are constantly breaking out on the eruptive skin of fashionable life, and now and then coming to the surface of the smooth cuticle of rural society, result from the restlessness of repressed nature under the disregard of this law? Needle-women may save the strength of their vision by not confining their work too constantly upon cloth of one color. A constant writer need not contract that form of paralysis called "steel-pen disease," if he will use pens of a variety of metal; or, in other words, change from one kind to another. There cannot be a particle of doubt that the disease is induced by too constant contact of the fingers with one metal. Some may not be aware that there is such an affection as steel-pen disease; many cases of it have been presented to my notice for treatment. The sense of smelling is made sick or paralyzed by an irritation with one odor, however agreeable when not too long applied. The sense of hearing is not impaired

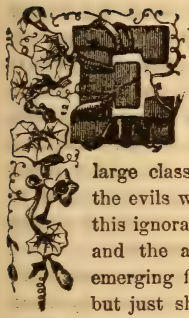
by loud, variable noises, but under the constant din of monotonous sound. The sense of taste becomes sated if only one article of food is used for a long time, and unless a person subsisting upon it is engaged in manual labor which causes great physical waste, loss of appetite will be an inevitable penalty. Frictionize the ends of your fingers for a long time on any one thing, and they will become numb, and I have no doubt that if the hands should be exclusively employed in handling some one material they would become paralyzed.

Perhaps for reasons of fickleness and discontentment, which the human family ought to overcome, the mind, too, is dissatisfied, if not disgusted, with monotony. Whether natural or because of evil adulterations, everybody is seeking change—change of air, change of food, etc. We are no less delighted with new things in our adult age than we were in childhood. Men and women have their playthings as well as boys and girls, and they are almost as constantly changing them. Here, then, is another secret which assists in accounting for the irrepressible tendency of mankind, as exhibited in all ages, to break down any arbitrary regulations which society has imposed for governing the sexes in their conjugal relations.

Now, dear reader, I have presented for your perusal a very radical (do you say presumptuous?) chapter, haven't I? Well, God knows my heart, that I do not want to injure the moral well-being of any of you. "Fools venture in, where angels fear to tread," and it may be that I am one of that unfortunate class first named. But I have felt impelled by moral convictions, no less than humanitarian considerations, to throw this bombshell into the very heart of our present rotten social system, and I trust, if it be ill-timed or unwise, that some good may sometime come of it.

CHAPTER VI.

THE REMEDY.



EVERYBODY is painfully conscious of the existence of evil—evil which must be rooted out before the human family can settle down to a condition of peace and enjoyment. A majority of the Christian world ascribe all of our afflictions to the "Fall of Adam." Another large class tell us, that the race is only in its infancy, and that the evils we encounter are the results of our ignorance, and that this ignorance is to be gradually dispelled by the light of science and the advance of art. By them it is supposed we are just emerging from the darkness of night: the rays of knowledge are but just shooting up behind the distant hills in the east. Practically it is immaterial which is right, so far as the social question is concerned; because, while the former should put their shoulders to the wheel and work faithfully for the realization of the millennium so long promised, the latter must fulfill the expectations of the world's people who are looking forward with enthusiastic hope for the "Good time coming."

It may be inferred by many from the title of this chapter that I am going to prescribe a panacea, or a kind of one "cure-all," for all the evils presented in the preceding chapter. I shall have to disappoint the hopes of all who are thus sanguine. May be an interrogation point, rather than a period, should have been placed after our heading. In Part IV. will be found many suggestions for the improvement of monogamic marriage, which, if heeded, I am confident would make things a little better. But to effect what is necessary both of the old marriage-systems must be pulled to pieces and a new order of things established, and until this is done, and it must be the work of religion, ingenuity, and time, it would be well not only to continue monogamy, but to tolerate polygamy, and even to encourage the new system of "Complex Marriage" as practised by the religious, industrious, and thrifty communities at Oneida and Wallingford. In making this suggestion, I presume I shall shock the sensibilities of some readers. There is an educated prejudice against polygamy, especially, which has considerable root in truth, and a great deal in bigotry. The newspaper press

catering to this prejudice, visits Mormon polygamy with the most sweeping denunciation. To my personal knowledge, many of these articles are written by men who personally hold to different opinions than those which they publish. In the literary world writing is regarded as a business from which to acquire a subsistence, if not wealth. And you cannot always judge of the personal proclivities of the newspaper-writer by his editorials. It pays at this juncture to denounce without qualification Mormon polygamy, and for this reason mainly it is done.

By looking over the results of the Complex Marriage System as presented in another place (see page 719), it will be observed that to all external appearances, it is working well on a small scale, and that it has already stood the test of a score of years. So long as there are some good people ready to hazard their temporal happiness in a new social experiment, when the old ones are so defective, the least we can do is to let them alone so long as they do not disturb the public peace. No one can say that the State of New York has suffered any moral deterioration in consequence of its toleration of the Oneida Community. On the contrary, monogamic society immediately surrounding it seems to have been benefited by its presence. That attractive writer "Jenny June," paid a visit to the Community, and wrote a letter to the "*New York World*" in which she spoke of the Communists as follows:—

"This visit was not one of mere curiosity. Advancing civilization is developing new forms of social evil, to remedy which everybody has a theory. The Oneida Communists have in certain ways proved themselves a great success. They excel in the arts and manufactures to which they have devoted themselves; *they have established a high character for just dealing, probity, and honor. They have lived down prejudice in their own neighborhood and enriched the surrounding country by utilizing labor, teaching the small farmers how to turn their land into fruit-farms, cultivate them profitably, and supplying them with a market.* We had furnished our table for two years with their canned fruit and vegetables, and wished to see with our own eyes if this was the only good to come out of this Nazareth.

"Reformers have not a reputation for much æsthetic taste, and with this impression, and the memory of a visit once paid to the North American Phalanx, brought vividly back to my mind, I confess I was astonished at the extent and beauty of the domain we saw spread out before us. The main building is a very spacious and imposing structure of brick, with white-stone facings. The walls are, many of them, covered luxuriantly with the Madeira vine, with its brilliant blossoms, and the extensive grounds are laid out with the taste, and kept in the perfect order of the most admirable private residence."

It strikes me to be sound policy to let this new system grow side by side

with monogamy and polygamy, and if it shall show greater products of religion, morality, industry, individual progress, and happiness, take good care of the young shoot, and it may be that in the distant future the old worm-eaten and rotten-rooted tree—monogamy, and the black old stump—polygamy, may be dug out altogether. Henry Ward Beecher, though he may not second a motion like this, has said that man is higher than institutions. "*The Sabbath was made for man and not man for the Sabbath!*" "That sentence," remarks Mr. Beecher, "is passed upon every usage, custom, law, government, church, or institution. Man is higher than them all. Not one of them but may be changed, broken, or put away, if the good of any man require it. Only, it must be his higher good, his virtue, his manhood, his purity and truth, his life and progress, and not his mere capricious material interests."

What I am dealing with every one who has read the preceding chapter must see appertains to something more than the "mere capricious material interests," of the human family. When, then, so good a man as Mr. Beecher says, that under certain circumstances old institutions however sacred may be laid aside, certainly a doctor of medicine may propose the same thing, when in his opinion there is a world full of sick people, who need something to elevate them above the reach of physical disease and moral pollution.

There are many merits—possibly many demerits—in the "Complex Marriage System," as presented to us by the Oneida Community. Prominent among the former are,—it overcomes the disparity existing in our popular system of marriage between the pubescent age of demand and the marriageable age of supply; it overcomes the evil of incompatible parentage, for when there is no restraint, attraction takes place only between those of such opposite natures or conditions as to insure viable offspring; it promotes a higher standard of average health in the Community, because the free interchange of magnetic forces among a great number, if the health-element predominates, raises the weak without perceptibly depressing the strong; and, if my notion respecting the creation of magnetism, by the union of male and female magnetism, be correct, an immense amount of new life force is generated under their Complex Marriage System; it provides against the utter breaking up of a family by the death of a parent, as often occurs in our system of marriage; it provides for the training of children by those who are especially adapted to this family function, thereby preventing society from being overrun with spoiled children, who, in adult age, are no less spoiled men and women; it unites the business faculties of one person to the intellectual faculties of another, and brings all these to the direction of strong muscle which in return supplies what the former are incapable by themselves of producing, so that the strong help the weak, and the weak help the strong, and no one suffers for bread. If its general

adoption is possible, and it should really become universal, prostitution would die a natural death, needing no aid from law or the prison. In its social aspects, it possesses all the advantages arising from associated labor, and makes selfishness unremunerative. As the reader reflects on the multitudinous evils growing out of the old systems, he will see in this new one something which, in most instances may serve as a remedy. It may be possible that "Complex Marriage," as practised by only a few hundreds of people on this continent, is prophetic of an advanced condition of society, when the whole human family will be united in one marriage; when, practically, the kingdom of God will have come, and our Maker's will on earth be done as it is done in heaven, in answer to the supplication of Christians from the moment the "Lord's Prayer" was put into their mouth by Jesus of Nazareth, down to the present time; and in answer to the heart's desire of all good people in or out of the church, who really believe that a time will come when peace, happiness, and fraternal love shall spread their genial influence over the whole face of our planet. In drawing this closing picture, do not understand me to say that "Complex Marriage" will effect all this. I am speaking of a comparatively untried system, and because it is untried I feel disposed to encourage rather than persecute those who are disposed to test its capabilities or possibilities. If the old systems were perfect, or if there were any reasonable prospect that they may ever be made so, we might afford to be less tolerant; although, if there is one lesson to be learned more than another in this world, to maintain tranquillity and promote fraternal affection, that lesson is, *toleration in individual action and opinion.*

As remarked before, we should tolerate Mormon polygamy. It cannot, in this enlightened age, absorb the female element to such an extent as to produce female scarcity, as oriental polygamy did in the early age of the world. At present, the tendency all over the world is to an excess of females at adult age. "The tendency of a dense population," remarks a newspaper writer, urging the necessity of making women self-supporting, "is to make the female sex preponderate, and we must find something to do with the surplus of women. If we look at foreign countries, we see that under the age of fifteen the males exceed the females; but that beyond fifteen the females preponderate, and so on until ninety. In sixteen foreign nations this holds good. In England, the ratio of females to males is as three to two; while in France, where the people are longer-lived than any other European nation, it is even greater. When we get up to the gray-haired era of life, we find in France, between 50 and 60, a female excess of 81,526; between 60 and 70 it becomes 186,471; between 70 and 80, 68,295; and over 80, 32,081. Of course these figures do not apply to the United States. In Massachusetts the women are nearly twenty thousand in

excess, while in Connecticut they are 6,114, and the same ratio runs through New Hampshire and Rhode Island. In Vermont and Maine, the men are in surplus; while New York shows 5,234 more women than men, to be accounted for by the crowded condition of New York City, which alone shows nearly twenty thousand in excess. While the open countries have a preponderance of men, in some territories as much as twenty to one, it is shown that the tendency of the female sex is to outnumber the other. As we grow in civilization, we must, therefore, expect this to take place; and it is proper that we should meet the problem now, and so decide it that we may have no trouble in the future."

From the foregoing figures it will be seen we can stand considerable polygamy, without making a scarcity of women. In this country there is not a particle of danger that this old marriage-system, if tolerated, would absorb the female element to any great degree. American women are as a rule too smart to marry a man whose social and religious belief would allow him to take a plurality of wives; and fewer still would marry one who had already a dozen hanging at his elbows, wig, and coat-tail. If you find one now and then, who would rather thus marry and have a piece of a husband, than to go through life without any, no obstacle should be interposed to prevent this choice: if there be a poor girl here and there, who would rather than make shirts for a pittance, receive a fraction of affection and comfortable support, your interference may send her to a more demoralizing school than the hearth of a Mormon elder; polygamy is better than prostitution. If there be any one who would rather marry a fraction of a man, than to go through life childless, it is a choice which does not concern us. It is none of our business. She may find that happiness in the possession of an affectionate child, and of companion-wives to relieve her of the conjugal drudgery of matrimony, that she could neither find in single life or monogamy. The educated prejudice in the minds of the people against polygamy, if called in question, is satisfied to defend itself in misrepresentation and denunciation, which amounts to nothing when you arrive at the "hard pan" beneath the dregs. There is a valid objection to polygamy; it enslaves woman. But it hardly looks well in us who so recently tolerated and even defended with Bible in hand *involuntary* servitude, to furiously oppose this species of *voluntary* slavery. I must confess I have no very great sympathy for a woman, who, without compulsion, enters and becomes a part of a polygamous family. Still, while doing nothing to prevent her from going in, I would advise the enactment of such legal regulations, as would open the door for her to go out when she found the relation an oppressive one. A safety-valve of this kind is not an impossibility. So far as the effects of polygamy upon our national welfare are concerned, there is nothing yet to show that they are damaging. The Mormons have

never hurt us, save in our imaginations. True, we have struck at them once or twice, and they have employed sufficient force to resist the blow. But we can hardly strike at any body of people on this continent who have not the pluck to resist. We do not grow cowards on American soil. As to their material prosperity, the *Round Table*, commenting on these people, and a book about them, remarks:—

"We are thus driven by the inexorable logic of facts to admit the possibility that, given certain natural conditions—the conditions of area, physical requisitions, and non-interference from without, which are precisely those which have attended our own national life—a society may thrive, progress, increase, accumulate all the material essentials of modern civilization under a system which in every leading characteristic is diametrically opposite to our own. We are forced to acknowledge that neither social nor political equality, neither universal suffrage nor enforced monogamy, are indispensable prerequisites to the diffusion of education, the enjoyment of happiness, or even to the solidity of the State. Relatively speaking, the Mormons have done in the enumerated particulars as much in their thirty years as the collective nation has achieved in its ninety; and, abstractly considered, we have no more right to predict the failure of their system from internal causes than that of the republic itself. So far as comparison between their chief city and our own in respect of cleanliness, order, temperance, thrift, and judicious expenditure may go, we are certainly at a disadvantage; and it cannot be denied that if there be an explanation of so intricate a problem which can save the credit of our own usages, and vitiate the force of the Saints' example, it is certainly not an obvious one."

Many suppose that polygamy is prohibited by the New Testament; but such was not the opinion of Martin Luther, and the synod of six reformers who were called upon to decide the question in a certain case. They held, says Nichols, "that the gospels nowhere in express terms commanded monogamy, and that polygamy had been practised by the highest dignitaries of the church." The same writer remarks,—"if the sayings of Christ are doubtful or mystical, those of the apostles are sufficiently clear. Monogamy is clearly required of bishops, deacons, and elders of the church; but not of laymen. Polygamy continued in the Christian Church until a comparatively recent period, and was allowed by Luther and the Fathers of the Protestant Reformation, as it also is to this day, under certain circumstances, by our Boards of Foreign Missions."

In a state of civilization like ours, some legal measures for the regulation of the intercourse of the sexes are necessary for the maintenance of peace and good order, and to insure the support of child-bearing women, and the products of their womb, at the age of helplessness. But every liberty should exist not inconsistent with this, and the moral and physical health

of the individual. A woman should not be allowed, if there can be created any power to restrain her, to cohabit with men for money or its equivalent. It is a direct violation of moral and physical law. It degrades, and in time destroys her moral instincts, and the habitual and excessive use of her sexual organs for such an unnatural purpose, generates and disseminates loathsome diseases. But why, in prescribing marriage, should one system be forced upon such a variety of people, any more than one religion? The

Fig. 172.

CLOTHES OF ONE SIZE AND PATTERN FOR THE MILLION.

majority of mankind believe in one God, but with this one faith there are Protestant and Catholic Christians, Jews, Mohammedans, etc. There are millions of people who accept Jesus Christ as the Divine Son of God and the Saviour of mankind. Accepting this faith, but materially differing in creed, are Episcopalians, Presbyterians, Baptists, Disciples, Methodists, Catholics, Universalists, etc. All mankind, with the exception of a few ascetics, must, in view of physiological teaching, acknowledge the necessity

of sexual association for the health and happiness of the race; but does it follow that all should be compelled to accept one system for the regulation of this association? Suppose for a moment a large factory should be established at the seat of government to make clothing for all the people of both sexes in the United States, and that one pattern be provided from which all these clothes shall be made. How do you suppose the garments would fit people who differ as much in bodily conformation as they do in opinion, taste, affection, and appetite, and *vice versa*. The annexed illustration gives an adequate picture of the absurdity of such a measure. I can almost imagine that hens and chickens would peer through the pickets, and horses and jackasses put their heads over the tops of them, and laugh with one resounding ha! ha!

Especially should courts of law keep out of families, and families out of courts of law, if any way can be invented to manage these things otherwise. The ancient Romans were never so orderly in their marriage relations, as when they kept law out of the family. If the reader has perused the "History of Marriage," he will remember that at that time, when no divorces were said to have taken place for a period of five hundred years, those people thought the family hearth was too sacred for public tribunals. They did not think that "legislation should touch the independence of the family, nor confine by legal restraints the ties which natural affection had formed." They pursued in their affectionate relations the even tenor of their way, and if they encountered difficulties a family tribunal could not settle, the censor was called in, and this officer acted on no rules of law, but simply on principles of equity as he understood them. Under this arrangement, as Rome swallowed up one nation after another, she took in those in which polygamy was practised, and it is a favorable commentary upon her system as it then existed, that her sexual morality did not show any marked indications of breaking down until they began to adopt Greek law for the governance of the family.

Rome, in her most orderly days, had a censor. We can hardly have one, for his prerogatives are too imperial to suit the advanced republican sentiment of our times; nor do we need precisely such an officer. But it seems to me we may learn from the experience of those who have gone before us, something of what we do want in the establishment of an office whose functions would not be inimical to the ideas of our liberty-loving people. We have now a Secretary of State, who takes charge of all matters relating to our intercourse with foreign nations; a Secretary of the Treasury, who manages our national finances; Secretary of War, etc., etc., each performing the duties pertaining to the portfolio of which he has charge. *We want a Secretary of Marriage*, whose duties it shall be to investigate the various systems of marriage which may have been practised from the earliest period

—study impartially their effects upon the peoples living under them—make annual reports of the same for the enlightenment of present generations, in order that they may profit by the experience of the human family in past ages; this report to be accompanied with such recommendations as may be thought best calculated to contribute to the happiness and moral and physical improvement of the people. This public functionary should be the central and guiding power of the various local boards recommended in the chapter commencing upon page 830, and in him should be vested the final power to decide all matters coming up from the local boards, wherein injustice may be alleged to have been done to any individual. Monogamy, complex marriage, and polygamy should be tolerated expressly by national consent, and it should be the duty of the local boards and this national officer to see that no one of these institutions exercises tyrannical control over any individual, or even restraint beyond what may be regarded as necessary for the peace and good order of society, and the moral and physical health of generations present and those to follow. As fast as science reveals them, the laws governing propagation should be thoroughly disseminated through these channels—thrown broadcast over the whole country, like the speeches of our members of Congress—and if, as is believed by all intelligent physiologists, the moral, the mental, and physical condition of parents at the moment of conception, is impressed upon the human being that is to be, this information should be so diffusively scattered as to find lodgment in every hamlet in our great and constantly expanding nation, and in no way can this be so effectually done, as by a national bureau established expressly to regulate marriage and procreation. We have at Washington a Commissioner of Agriculture, who scatters information and approved seeds to the agricultural people of the country, and it just may be that a human being is of as much consequence as a "big potato." The trial of such a plan as I have proposed, is of course, an experiment; but it can hardly be regarded as a dangerous one. "History," remarks a newspaper writer, "is only a record of national experiments. They are going on now in Russia, in England, in Mexico, and in all South America. A nation that does not try experiments is not merely bone-broken but dead and decaying."

Now, reader, I have presented an outline of some of the reforms which are manifestly necessary for the improvement of the health and happiness of the people under the restraints of marriage. You will doubtless, many of you, demur to the proposition to make laws that will expressly tolerate complex marriage and polygamy, but are not either or both in their most unfavorable aspects better than prostitution? Whatever may be the ultimate destiny of our race, people are not nowadays all run in one mould. Some men are by nature as it were polygamists—other men and women are omnigamists in their tastes and passions, while we affect to believe that

nearly all women and a majority of men in our country are satisfied with monogamic marriage. Or, if you like, put it in this shape. We have to-day living in one civilization and under the parental care of one government, those who in their natures are little above the barbarian: those who are considerably advanced beyond this stage; those of middling intelligence; those belonging to still a little higher sphere; and finally we have those who are gifted with moral and intellectual endowments which challenge our admiration. And then—shall I say it—even among this last class you shall find polygamists and omnigamists (or free-lovers) as well as monogamists. We have among our Christian missionaries the example of toleration in respect to polygamic marriage. They find that many of the people among whom they are laboring cannot be restrained from having a plurality of wives, and consequently,—and I think very wisely,—they let the marriage question alone. If those people are heathen, we have any number of them among us; and you need not go to Utah, nay, you need not leave the limits of Manhattan Island, to find them. Many of them achieve what the world calls greatness, and when they die long obituaries extol their virtues. Some of those who are casting stones at the Mormons would break their own windows if they leveled their missiles at the nearest domiciles wherein polygamy is practised. The Mormons, indeed, are better than this class of assailants, for they do not morally degrade their women. But you may ask, "Why legalize polygamy?" Simply that women may better be the wives than the mistresses of men; better the slaves of the respectable—possibly the religious—polygamic household, than the traffickers in lust in the dens of harlotry. One of the early Christian emperors offered rewards to those who would marry their concubines. It is vain to say that you will yet banish the mistress, or that you will blot out prostitution. The religious world has been working at it most vehemently, and with an army of strong men and strong women, for at least five hundred years, and Christianity has been pitted against it for nearly nineteen hundred years; and to use the language of a western orator—"Where are we now; where are we driftin' to?"

As for "Complex Marriage," as remarked before, let it run along side by side with other marriage institutions, and we can then determine if it is better or worse than the older systems. The polygamic system is nearly as old as the world, and the monogamic system is at least two thousand five hundred years old, and the society-makers certainly have not yet attained any very gratifying results in their efforts at perfecting the morality, health, and happiness of the people living under them. We need, I repeat again, the inventive and progressive spirit of the age directed to the discovery of means whereby the human family may be wholesomely governed in their sexual relations, so governed, indeed, that nature's insti-

tutes and individual rights, may not be disregarded, while all that relates to the moral and religious well-being of every individual, may be made still more perceptibly operative. Under the auspices of a national bureau, devoted to the investigation of this great social problem, prizes might well be offered for the best theses on the subject. When any thing is proposed that looks right and feasible, if there be found those willing to go on to some unimproved lands and make the experiment, let them do so, followed with our prayers, instead of our denunciations. If a dozen social experiments were being made at this moment on our almost limitless territory, they could hardly affect those who would prefer to adhere to monogamy; and that form of society which time and trial should prove to possess the greater merit, would, and by right should, ultimately become the prevailing one. Galileo whispered to himself when compelled on bended knee to recant —"The world *does* move." Who will have the courage to-day to shout on the house-tops, *Let it move!*

CHAPTER VII.

SEXUAL IMMORALITY.

S sexual morality, even among nations nominally the most Christian, a prevalent virtue? If so, where is the moral oasis? It is not in our great cities; they are as destitute of it as were the cities of Rome and Athens in the "Augustan Age," when legal penalties without measure failed to restrain the illicit sexual practices of the people. It is not in our villages, where there is always enough scandal based on fact, for the villagers to keep up an incessant talking at their tea-tables and sewing-circles; nor does it present itself conspicuously in rural districts, where one might expect surely to find it, for apropos to the application of some people to the city doctors for that great myth and humbug, "Lové Powder," come others, for something to destroy the passions of some unprincipled lover, who has succeeded in getting the fair name of some woman, single or married, so in his keeping, that she dare not leave off amours unwisely commenced. In addition to these, come the pitiful appeals of young women living in small as well as large neighborhoods, for something to save their name from the disgrace which awaits them, in a system of society where the masculine rake is the admitted guest of the respectable family, and the mother of a bastard the horrid creature that can scarcely be tolerated under the shelter of her parental roof. These letters have often drawn tears to my eyes, for while the trembling hands that penned them, importuned with the most touching eloquence for relief, neither pecuniary compensation, nor the deepest and most heartfelt sympathy could induce me to extend the criminal aid so frantically sought. It may be asked why I have been appealed to for relief in such cases. I can solemnly assure my readers that it is *not* because anybody has ever had relief of this nature at my hands. It is considerably over ten years since I first commenced the publication of this work, and as I have ever in its pages, and its revisions, espoused the cause of women, I am naturally made their confidant in the hour of trouble, and most gladly would I have lifted the wretchedness from the breaking hearts of those who have been plunged into misery through the treachery of bad men, or the terrible mistakes of those otherwise good, had I not ever entertained the greatest abhorrence to this

crime against natural and moral law. And let me state here—lest I may forget to do so in some more appropriate place—it has not been my custom in the past, nor will it be in the future, to lend my professional assistance in any case of this description; and those who fall into trouble of this kind, will greatly spare my time and mental tranquillity by not presenting cases which my resolutions prevent me from touching. And, furthermore, as I always tell this class of unfortunates, if they are bent on such desperate measures, they do not want a novice to help them out. No one wants to be the subject of an experiment, or the material to be sacrificed in the hands of an apprentice. Therefore do not ask me. Forgive the digression. We will return to the consideration of the subject of our chapter, sexual immorality, and first examine

The Causes.

Having, with facts in hand, possessed by comparatively few in or out of the profession, charged both country and city with sexual immorality, the next step will be to inquire into the causes. What are they? It is my deliberate opinion, that one of the greatest causes is the inadaptation of our popular marriage-system to the *natural* wants of the people. It would almost be repetition for me in this place to argue this proposition after what I have said in several places in this Part. I would refer the interested reader to the essay on the influence of the sexual organs on health, and to the chapter on the "Defects of Marriage."

It is also my serious opinion, that a cause almost as potent as the foregoing, is, that the sexual morality generally preached to us is mainly based upon a false idea, one so in conflict with Nature, that many do not at heart believe it, and those who do, excuse its violation by themselves, with the reflection that human nature is imperfect and that God is gracious. The popular idea is this: *that sexual intercourse in itself is sinful in all cases unless hallowed by marriage.* This idea is mainly based upon the supposed divine origin of marriage, which fallacy I have attempted to overthrow in a previous chapter. But it is difficult to see how this opinion could have been derived from Scripture. I have not the time nor inclination to go into any extended Scriptural argument on this point, for the doctors of divinity themselves disagree in regard to it, and a doctor of medicine may look grotesque if he intrudes in this discussion with a physiological work instead of a Bible in hand. But I must say a little something from recollection of what is presented in the Good Book. Unless the commandment, communicated through Moses—"Thou shalt not commit adultery"—appertains simply to the enforcement of honor in man's *civil* relations, it is difficult to understand it in the light of Hebrew history, for not only did Abraham and Isaac, who were in personal communication with Jehovah, have connection with

their wives' maids without reproof, but after the above commandment was given, the great Hebrew lawgivers, including David, "the man after God's own heart," and "Solomon the wise," had concubines, the latter seven hundred! Then, too, if this idea be correct, it seems like a most mischievous example that was claimed to have been set by our Creator when, as alleged by Moses, He commanded him to distribute among his people those female Midianites, over thirty thousand, to be their wives and concubines, for by so doing, both the men and their concubines were to render themselves impure and immoral, by sexual connection, without marriage. But not only was this example tolerated as not inconsistent with religion, but there is nothing to show that even the promiscuity of the early patriarchs when confined to the healthy women of the household caused disease; it is said that the Mormons who practise polygamy are exempt from venereal affections. If sexual promiscuity is not unhealthful for men, there is no reason to believe it is so for women who do not violate physical law and moral instincts by selling their favors to men, thereby scourging the flesh with disagreeable companionship, disgusting excesses, and putrefying uncleanliness. We find this fact sustained by the experience of the Oneida Community. No venereal affections have been generated by their sexual practices, and as it is shown by the testimony of a physician who visited them, there are no external physical indications of uterine disease among the females of the Community. Hence, I cannot receive myself, nor do I wish to assist in disseminating the idea, that sexual intercourse is wrong in itself, unhallowed by marriage; nor is it best to attempt to deceive ourselves with the idea that even promiscuity when induced by actual attraction, and not by "filthy lucre," is unhealthful. We must have a better basis for sexual morality than either of these fallacious dogmas, one of which has little controlling power over even the Christian world, because of the generally received opinion that there is no possibility of attaining to human perfection, and the other, little if any over the world's people, because it does not accord with the results of their unrestrained experience.

Over 400 years B. C. the philosophies of Pythagoras and Plato, gave rise to the idea, that the body with its passions was essentially evil, and that virtue consisted in its purification from their taint. Saint Paul seems to have been considerably saturated with this pagan notion, and the Romish Church accepted it; nor did it get filtered out of the doctrine of the church during the era of clerical licentiousness which followed its adoption, nor yet during the sifting the Romish Church received at the hands of Luther and the early reformers; although even their personal habits were inimical to it. Calvin and the Puritan Fathers gave it new germinal life in the Protestant Church, and it ripened upon the soil of Old New England (whom we love with all her faults) until in Connecticut, at one time, it was considered

sinful for a man to kiss his wife on Sunday. The idea took such root in the minds of many of the Christian Fathers, that they did not believe in the purity of sexual intercourse when sanctified by marriage. Strange examples were presented in those days of wives living virgin lives, and of husbands leaving their wives to avoid what they considered an impure connection. By some of these extremists it was considered to have been the original sin and there were more practical shakers in those days than there are at this time, surrounded as they were by the most open licentiousness among the clergy and in the church. It may have been the natural and inevitable rebound from the prevailing immoralities of a declining empire. But bear in mind it was a Pagan and not a Christian idea. What we call platonic love originated, in name, with Plato—a Pagan philosopher—who was born 430 B. C. The early Papal Church presented the greatest dogmatic bluster, and the least show of example in reviving and giving perpetuity to the notion. At first it tried to prevent the intercourse of the sexes, and even marriage altogether; but at last it settled down to the position of enforcing celibacy on the priesthood; of encouraging it among women by the establishment of nunneries wherein marriage is prohibited; and of permitting marriage among the balance of her church-people for the one purpose of reproduction. If the sentiment, unnatural as it is, had succeeded in establishing a code of sexual morality which actually controlled the amative impulses of mankind, it would be far from my wish to expose its fallacy, especially if the present condition of things, then absent, could be even faintly pictured to my imagination. While saying this, however, I can hardly imagine a condition of person or society wherein *truth* fairly presented may not have a more moralizing influence than falsehood or error, based upon supposed expediency. If there ever was a time when little children could only be frightened to obedience by bear-stories, and grown up children by a threatened burning with sulphur, that time, in my humble opinion, has, happily for the dignity of mankind, passed. It may have been necessary, but I do not believe it, for Father Hardouin to tell the people of the seventeenth century, "that the rotation of the earth was caused by the lost souls trying to escape from the fire that is at the centre of the globe, climbing in consequence on the inner crust of the earth, which, he said, was the wall of hell, by which the whole was made to revolve like the wheel of a squirrel's cage by the rapid climbing of the animal!" The people in this century are as rapidly outgrowing superstitions, as our boys are outgrowing their clothes, and we must have a religious literature suited to the advanced condition of the race. In the matter under consideration it is almost if not quite impossible to deceive mankind, for man and woman have his and her own personal experience, and this experience is antagonistic to the celibate or ascetic idea, unless God's law and Nature's law

are in direct conflict, which no sensible people of this age are ready to admit.

The Cure.

The work first to be considered, but not first to be accomplished, because the ingenuity and wisdom of many generations may perhaps be taxed for its successful completion, is a system of civilization or of marriage which will satisfy the natural wants of mankind with all its diversified tastes and harmless passions. This having been suggested in the chapter entitled "The Remedy," I will pass it over here and come to something which is this moment practicable.

Confucius, the demigod of the Chinese, enunciated, over two thousand years ago, this silver rule: "Do not unto others what you would not have them do to you." Jesus of Nazareth, about five hundred years after Confucius, proclaimed this golden rule: "Therefore, all things whatsoever ye would that men should do to you, do ye even so to them." The first counsels you to inflict no injury upon your neighbor, and the last, more comprehensive than the first, commands that you shall not only do your neighbor no harm, but that you shall do him good, even to the extent that you would have good done to you. If the world's people, or even those who accept the religion of the New Testament, are disposed to doubt, whether, in our present civilization (so much the worse for civilization), the golden rule cannot be lived up to faithfully by the few, when utterly disregarded by the many, without bringing to starved martyrs early and cheap tombstones, the silver rule of Confucius may be practised by as many as will adopt it, without incurring the hazard of being literally devoured by those who do not. And one fact is self-evident, *i. e.*, that the human family never can be a "happy family," till at least the silver one is obeyed. Even the Hebrews, two thousand years ago, professed to live according to the silver rule of Confucius, and the Christian world, for over eighteen hundred years, has aspired to live up to the golden rule given by Christ. It is sickening, however, for those who have the good of mankind at heart, to see how far short of even the first rule, the majority of people have ever come, and especially in their sexual relations; while it is only by a strict observance of it that a remedy can presently be found for the existing evil. But to make it available here, we must understand the social compact under which everybody lives in the civilized world.

In the original formation of society, and the development of what we are pleased to call civilization,—the demarcation of boundaries of individual possessions; the definition of proprietary rights; the establishment of rules for mutual government; to the end that peace and prosperity might prevail among those entering upon this new order of things,—certain individual

liberties were surrendered and obligations assumed—not only by those who originated this system of society, but by all afterward, who being born in it or entering it, should claim its protection. At the outset, women as well as estates were considered the property of the men who possessed them. Fathers owned their daughters, and husbands owned their wives. As time rolled on, and man learned to respect a little more the rights and happiness of woman, marriage became, at least ostensibly, a mutual bond, and *my husband* signified as much of a proprietary interest as *my wife* once did. In polygamic marriage, the husband became pledged to fidelity to his wives, as the latter aforetime were to fidelity to him. In monogamic marriage, the husband and wife took the pledge of *mutual* fidelity. And, in the complex marriage system of the Oneida Community, in pursuance of this same rule handed down from earlier civilization, the male and female members are under mutual obligations to restrict their sexual liberties wholly to those constituting their family. This society, with all the freedom they have established among themselves, would denounce it as sinful, for any member, male or female, at home or absent, to cohabit with those not belonging to their circle. This formation of family boundaries, and assumption, by those entering marriage, of certain well-understood conjugal duties, early led very naturally to the social proscription of men and women—(though in fact only the latter)—who should have sexual connection without the license obtained by marriage. Even among the Greeks, chastity was required of their native women. Only foreigners were allowed to be courtesans. The sentiment gained strength as civilization advanced, until women came to be regarded as infamous who violated the rules marriage had established. It therefore devolved upon fathers and brothers, for the protection of daughters and sisters, to inaugurate a moral code which should be mutually respected; and the obligation assumed amounted practically to this: "We desire to maintain the chastity and social respectability of our unmarried females, and for this purpose we mutually pledge ourselves to abstain from all carnal connection with those who are not united with us in wedlock," and from the moment this understanding was first entered into, to the present time, most people in Christendom have lived *professedly* in compliance with it. If I could say *actually*, instead of professedly, much of the social wretchedness which is encountered on every side would have been avoided. Prostitution would not exist; young women "loving not wisely but too well," would not be driven from their parents' door freighted with illegitimate offspring; practical concubinage, under the guise of the "mistress," with the social ostracism of the female victim, would not be presented to our view, so unblushingly, by men of wealth, who put down scandal and obtain respectability with the "almighty dollar,"

There is, perhaps, nothing more demoralizing in our social life, than the example of men who guard with jealous eye and revolver in hand their marriage-bed—who growl like a dog over his delectable bone, when men of easy virtue approach their wives or daughters, while other people's wives and other people's daughters are regarded by them as only so many cattle turned into the common for them to feed upon. They suckle this milk, and feast on this flesh, without apparently thinking for one moment, that they thereby morally forfeit that protection of their own families, which is derived from the social compact, originated and professedly maintained in the way described. Nor can a court of justice do a greater act of injustice than to acquit the husband who enters its portals with the blood of vengeance on his hands, and the stain of the adulterer indelibly impressed on his character. The toleration of that kind of selfishness which makes all things right for *me*, and the same things wrong for my neighbor; the greediness which regards the whole world as made simply for the gratification of *self*, without regard to the happiness and rights of others, presents our planet to the higher order of existences which may be viewing it, as simply a great cheese, loaded with skippers, climbing one upon another, and tumbling down in their frantic efforts to individually get the best, and enjoy the most.

From the foregoing it would appear, that one of the boards which should enter into the platform of a true sexual morality, is respect for those mutual, social obligations which all men assume, who demand of society the protection of the chastity of their wives and daughters. Another plank may be cut out of what I have already said in the chapter upon the "Demerits of Marriage," in regard to mutual obligations assumed, practically under oath, by those who make vows of fidelity before the minister or magistrate on entering wedlock. Men and women who make these promises to each other so sacredly, and who, upon the witness stand, would not swear to a falsehood, are bound as if by oath to fidelity to each other. "Aristotle," remarks Lecky, "had clearly asserted the duty of husbands to observe in marriage the same fidelity as they expected from their wives, and at a later period both Plutarch and Seneca enforced it in the strongest and most unequivocal manner. The degree to which, in theory at least, it won its way into Roman life, is shown by its recognition as a legal maxim by Ulpian, and by its appearance in a formal judgment of Antonius Pius, who, while issuing, at the request of a husband, a condemnation for adultery against a guilty wife, appended to it this remarkable condition: 'Provided always, it is established, that by your life you gave her an example of fidelity!' It would be injustice that a husband should exact a fidelity he does not himself keep." Under some circumstances, the husband and wife may doubtless mutually release each other from this bond; or the bond may be

forfeited by the unjust cruelty or infidelity of one of the parties thereto; otherwise marriage would be practically indissoluble; but, without consent or forfeiture, it is clearly perjury to disregard this vow.

Another plank remains to be added to the platform of sexual morality. It is not only inconsistent with the higher rule given us by Jesus, but with the less rigid one given us by Confucius, and the very lightest one at all compatible with human happiness, for any man to insinuate himself into the affections of a woman, and, under the freedom allowed him by her confidence, arouse her passionate nature, and then take advantage of this species of intoxication to induce her to do that which, in her returning sober moments, brings the tear of remorse and a burning sense of disgrace. This is not only a wanton disregard of the rule, "Do not unto others what you would not have them do to you," but is rank deception. You made this woman believe you loved her, or you could not have succeeded in your efforts; when if you really did entertain affection for her, you would not risk her happiness by any such impulsive proceeding. It is only the natural desire of the human mind to make happy those we love. The happiness of such persons is linked with our own, and their miseries fall like icy dew upon our spirits. Then do not profess love for one you have made thus wantonly wretched. You do not love her. You deserve the terrible name which modern society has made for you. You are a *libertine!*

Here let me digress in defence of the much-abused class contemptuously called "Free Lovers." In my search for facts and conclusions in regard to social matters, it has often happened, that I have encountered those who believe our marriage system so defective, that it should be overthrown, and that the affections and the exercise of them should not be restrained by legal enactments. Those people are confounded in the popular mind with those unprincipled creatures who are known by the names of libertines and "loose women." But not one of them that I have met deserves thus to be classified. There may be libertines, and there may be loose women, who claim to belong to the ranks of those who believe in a social revolution, that shall elevate the morals and emancipate the affections of the human family: but I have not been so unfortunate as to run against any of them. I am satisfied, too, that the men and women who have earned the popular epithet —Free Lovers—at least the great body of them—in their sexual practices, do respect the opinions and the educated prejudices which surround them. Men of this class do not persuade thoughtless and indiscreet young women —nor accomplish their ruin in the delirium of passion; nor yet do they shake the tree of marriage, if it can be charged that they take the fruit that falls through some blasting cause. The women of this class do not entice youth; they do not exchange their favors for gold or finery; nor do they seek to bear away the masculine prizes other women have

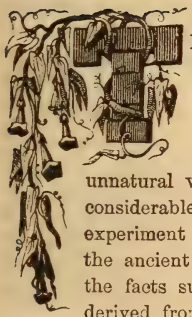
obtained, if it can be charged that they gather up prizes that have been dropped by the wayside, through some natural or acquired incompatibility. Hence, there is a distinction *with* a difference.

We will return to the platform of true sexual morality. We thought the planks were all in. We have omitted a very important one: no man has a right to persuade a woman, when her compliance will lessen his respect for her, or her respect for herself. If you respect her less, you have degraded her in your estimation, and must believe that she has done wrong, and you have no right to be accessory to that wrong. If you know that she respects herself less, then, too, you must admit she has committed a crime against her conscience, and you have been accessory to it. Again, you have no right to persuade a man's wife to do that which you would not have your own wife do; you have no right to entice your neighbor's daughter to do that which you would not have your own daughter do; you have no right to take those liberties with anybody's sister, which you would be unwilling to have taken with your own sister. This rule forms an additional plank which comes in where it properly belongs, *i. e.*, after the paragraph speaking of the dissenters from our present social system; for I desire to have this platform of sexual morality broad enough for all sorts of people to meet thereon. I believe that it is now complete, and we will take each board, stripped of its braces and nails, and see what we have:—

1st. The mutual *pledge* society offers, and men practically and morally take who claim its protection; 2d. The vow of mutual fidelity sacredly made in entering marriage; 3d. That humanity which leads one to respect the happiness of another; 4th. That principle of honor and morality which deters a man from degrading a woman in his own estimation, or leading her to violate her moral sense, or leading a wife, daughter, or sister belonging to somebody else, to do that which you would not be willing that your wife, daughter, or sister should do. Let the unchristian world fasten these planks together with the silver rule of Confucius, and the Christian world with the golden rule of Jesus, and each hold to the platform as respectively fastened, and we may look, with a reasonable prospect of seeing a refreshing change in the sexual morals of the human family.

CHAPTER VIII.

CONCLUSION OF PART THIRD.



THE rapidly multiplying pages of this work, admonish me that I must bring Part III. to a close. Many good people who have followed me thus far from the opening chapter, may feel more than ever discouraged as to the ultimate redemption of the human family from unnatural vice, selfishness, and unhappiness. Doubtless a very considerable number of readers were not aware, till now, that the experiment of monogamic marriage was so thoroughly tried by the ancient Romans long before the Christian era. In view of the facts supplied by history, and those presented in this volume, derived from the observation and professional experience of the writer, many will say, and very truly, that we are simply living the past right over again. The founders of Rome were as austere as our Puritan fathers. They inaugurated a system of marriage which differed in no essential particulars from that observed by our Puritan fathers. And their morals springing therefrom were no less rigid. The fact that a Roman senator was censured for kissing his wife in the presence of their daughter, was paralleled in Connecticut when it was considered sinful and made unlawful for a man to kiss his wife on Sunday. The Romans, however, maintained the rigidity of their marriage system, five times longer than the age of our nation; when, finally, the reaction came, and, following the reign of the Cæsars, the corruption of the empire far outweighed the virtue of the republic. Our reaction is coming, unless averted in some sensible way, in an incomparably shorter period,—if, indeed, it be not already upon us. And are we to learn nothing from the past? Aside from the political and other causes which mainly led to the downfall of the ancient republic, it is plainly manifest that there was a tremendous rebound from the unnaturally rigid sexual morality of the Roman fathers. This revolution was attempted to be controlled by Christianity upon the dawn of the Christian era, when again the opposite extreme was reached in precept, but not in practice. When the church first adopted and tried to enforce the pagan idea, originated by Pythagoras and Plato, that the passions should be subverted, and

then, when it so far progressed in this direction as to conclude that sexual intercourse was the original sin—the crime which caused the fall—the most strenuous efforts were made to break down, not only every system of marriage, but to suppress the amative passions of men and women. These efforts, instead of having their intended effect, were followed by the grossest excesses everywhere, so that the clergy were forbidden to visit the houses of single women and widows; and even the nunneries became the abodes of harlots. When the church gave up the attempt to control the laity, it hoped to succeed with the priesthood, by concentrating its ascetic efforts upon it. But here it signally failed, and the open debauchery of priests was sufficient to attract the observation and denunciation of the civil authority.

The rise of Protestantism and its license to its clergy to marry, and finally the benefits seen to arise from this measure, shamed the Roman priesthood into at least the outward appearance of virtue, and now the clergy of all denominations, including the Catholic as a body, preserve at least an exterior of respectability. The fact that those adopting the clerical profession are men upon whom all eyes are turned for emulation or criticism, renders it necessary that they maintain the utmost degree of circumspection. Besides the occasional illustrations publicly presented to show that they do not always succeed in this, outside of their ranks, as already exhibited in various places, there are eruptions upon the social cuticle, which show that there is something wrong constitutionally. This wrong I believe to proceed from an attempt by moralists to avoid the recognition of the legitimacy and purity of the amative passion, and their refusal to provide for its complete and *natural* gratification. I have already repeatedly called attention to the disparity existing between the demands of nature and the provisions made for them by society. Read the "Demerits of Marriage," as presented in a preceding chapter, and give the suggestions therein made a little reflection. Also give due consideration to the essay on the influence of the sexual organs on health, and do not omit to look over the essay on "Sexual Starvation." If, then, the reader agrees with the writer upon what nature requires, let him examine our marriage regulations, and see how far short they fall of what is needed to make mankind honest, contented, and virtuous. No objection can be made by any decent person to the enactment of the most rigid laws, and to the imposition of the heaviest penalties upon those who may be detected in the practice of unnatural vice, such as self-pollution, sodomy, and sexual connection with the lower animals. But all legal measures should carefully discriminate between these vices, and the natural gratification of an appetite which not only ministers to the physical health, good-nature, and happiness of mankind, but preserves our race from utter extinction. The Roman fathers made a mistake in trying to establish a rigid system of monogamy and

their experiment ended in a revolution which subverted all principles of personal honor, and extinguished all landmarks of sexual morality. So great was the power of public opinion, no legal measures were necessary to enforce the strictest monogamy the world ever saw, but when the reaction began, the most stringent laws and terrible penalties could not control the people, and it is probable that the intrusion of courts of law in the family accelerated the rebound.

While reading the proof-sheets of these pages, the writer finds, by an article in the *New York World*, that there is quite an unusual perturbation at this time in the public mind upon the marriage question. It seems "that the growing laxity of the marriage tie, and ease with which divorces are now obtained in nearly every State in the Union, have called out on the one side such men as President Woolsey to declaim against the dangers which threaten this social relation; and on the other side, there is," this writer alleges, "a regular school of writers and religionists who boldly announce their opposition to the marriage institution." He states that there is a large weekly journal in Chicago avowedly devoted to the abolition of marriage and the substitution of the largest license, and that the contributors to this journal are generally women. He remarks, too, that there are any quantity of novels making their appearance in the West, covering, with the thin disguise of the story, a pronounced advocacy of the free-love doctrine. "The supporters of the new organ, and the new school of anti-marriage literature," continues this writer, "may be counted by the thousands at the West; and at the East, even, Mrs. Stanton has written a pamphlet which more than insinuates that the existing laws relating to divorce are necessarily bad, because they are wholly framed by men." It may be added, that the newspapers are just now criticising a new work, claimed to be written by a Christian philanthropist, which defends polygamy on Christian principles. It hails from Boston, and, judging from the comments of the journals upon it, I should infer that the name of the writer is not given. Who is he? Let him come out from his ambuscade. Let anybody who has any thing to say stand up boldly and proclaim it. The *World* writer exhibits some solicitude after giving his testimony. "The positive advance the new and dangerous doctrine is making, and the hold it is taking upon large masses of the people," he says, "is a matter of grave import to the future of this country, and," in his opinion, "the subject commends itself to the philosophers and preachers who are interested in our social progress."

It strikes me, that however radical may be the views expressed by the writers alluded to, they should be hailed as valuable contributions to social literature, and the objections of President Woolsey, and all others who oppose them, should also receive the consideration of all candid minds. It

is quite time that the public should be thoroughly awakened to the consideration of one of the most important social questions of the day: and to get at the truth it is necessary that all sides should be heard. Let us have the facts of the past—the domestic photographs of the present—the written history of the dead—the personal experiences of the living, and then let us set ourselves at work for the establishment of such regulations as may conform to the comfort, religion, and peace of generations present, with such self-adjusting measures as will enable them to shape themselves to the needs of generations to come, without necessitating frequent social revolutions.

The proper course for us to pursue, as it seems to me, is to familiarize our minds thoroughly with physiology, and then reconcile marriage and religion to it. The Rev. A. P. Stanley, on resigning the professorship of Oxford, and becoming the Dean of Westminster, spoke truly, generously, and nobly, in what was said to be among the most striking pulpit discourses of modern times. He wished to bring about an alliance between science and religion, instead of watching defiantly the progress of the former. "Science, criticism, philosophy," remarked Mr. Stanley, "in their convergent forms stand before us; but they stand before us in a new attitude. They are not hostile, as in the last century; they are not contemptuous; they are not scornful. They wish to be religious; they want to be Christian; they will be friendly if we will but regard them as friends; they give us counsel, if we will but take it as counsel, instead of spurning it as an affront. It is for us to choose whether we will make the *worst* of all scientific inquiry or whether we will make the *best* of it, whether we will treat critical researches into the nature and authority and language and history of the sacred book as heretical, infidel, and unbelieving attacks; or whether we will hail them, even when mistaken, as contributions to the one great aim in which we are all engaged, of a better knowledge of God's word and a better understanding of God's will."

The universal practical adoption of the suggestion of Mr. Stanley by the religious world, will be the most important step yet taken toward the establishment of true Christian religion. Let us find out by every available means what nature teaches, as well as what the good book reveals to us, and then see if we cannot harmonize the developments of science and philosophy with the principles of true religion.

With all the manifestations of human depravity, there is in the great body of intelligent men and women in every sphere of life an aspiration to do right, and an outspoken admiration of noble qualities. Even in the pit of the Bowery theatre, applause is never so great as when some victory of a supposed good over a supposed evil is strikingly pictured. If, then, we strip our social customs, and civil statutes, of that garbage which is in con-

flict with natural law, if we will break the hard outer shell of religion, and mix its spiritual meat with the clarified sugar of science, honor and virtue and religion will be sweet rather than bitter to the human taste, and like delectable lozenges advertised by an enterprising druggist, "children will cry for them!"

It is quite likely that some patrons, friends, and readers, will "cut" the author for his outspoken "Plain Talk." To such he will say, he is not, nor has he ever been ambitious to become rich. He would not greatly enjoy the luxuries of wealth when so many are suffering around him for bread. Should he attain riches, he might be too selfish to dispense creature comforts with a prodigal hand, thereby placing his greediness in conflict with his better impulses. Patrons will always be as numerous as he can immediately attend to, for there are those familiar with his success that no amount of prejudice growing out of difference of opinion on social questions will deter them from employing him when sickness enfeebles them. Friends he has who will stick to him through evil as well as good report; he has faith in them, and, too, that confidence in himself which leads him to believe he will not justly forfeit their affection and esteem. Critics cannot make their prejudices mischievous, because the book must be read before the prejudices of the reading public can be justly formed, and after a perusal it is hoped that if his views are not altogether correct, a train of reflection may be induced which will at least lead to the evolution of new truth. It is pleasant certainly to be on the popular side. The author used to be ambitious of the praises of men; this he has measurably outgrown, but is still somewhat sensitive to their censure; but no amount of the latter could deter him from doing that which conscience prompts him to do. The writing of this Part is the fulfillment of promises sacredly made during the night watches; he believes he has ever honorably discharged all his civil obligations, and it will be his aim to discharge his moral duties. This portion of this work he conceived to be a task belonging to the latter, and though it has been performed with many interruptions and discouragements, he has felt impelled by a power greater than his own, to indite what has been herein written.

More good people, however, are in sympathy with his views than many may suppose. We do not always know the heart sentiments of our next-door neighbor. "A man," remarks a quaint writer, "may go much among men and only look at them as he does at the trees and stones. But if a man of this habit gets near enough to the strange men he finds in strange fields, he will get their half confidence and self-revealings which will somewhat complicate his observations and fill him with surprise as if spoken to by the rocks. Most of the men I meet, hold their opinions somewhat privately, and they guard them as they do the tender places in their bodies. A man

opens his mind guardedly as he does his wallet in a crowd, and if he shows his belief, he does it in the same manner in which he speaks of his love."

It is time, however, that every thinker should think aloud and compare notes. There will always, doubtless, be a conservative class, to oppose any new truth or measure which may be suggested, but for the present, at least, its power is not great enough to squelch the life of a reformer, if it be sufficient in some cases to visit him with social ostracism. Let us trust the world has got forever beyond the infliction of the penalty of death for opinion's sake. "At all times," remarks the *Lewiston* (Maine) *Journal*, "the conservative party, when strong enough to enforce its will, has been a party of persecution. It poisoned Socrates; it crucified Christ; it threw the Christians to the wild beasts in the Roman amphitheatre; it established the inquisition; it forced Galileo to confess that the earth stands still; it laid its paralyzing hand upon Columbus; it kindled the fires of Smithfield: it gibbeted Quakers; it persecuted Arkwright; it laughed at Fulton, etc. It always was, it is now, and always will be, like a purblind bat, terrified at the breaking dawn, fearful that the universe is to be given over with the rising sun to inextinguishable conflagration!"

From its ancient power to destroy those who attempted radical reform, the conservative class can now do little more than to point the finger of contempt at one whom it marks as a fanatic, and this kind of persecution ought not to daunt the spirit of any one who loves God and humanity. It is nevertheless too true that people fear to express opinions; fear to act as they feel almost constrained to do, lest they become unpopular by so doing. Many a valuable thought which would have added impetus to human progress is suppressed, and perishes for the time being with the brain which originates it, because its author fears its utterance may render him obnoxious to his companions. Not, perhaps, until another generation, is the same thought conceived by one who has the heroism to utter it. When, finally, it ventures out in an address or in the pages of a book, denunciation is the penalty which is pretty sure to fall upon the head of the contumacious speaker or writer. Considering this state of things, not until the human family acquire a more liberal spirit of toleration can human progress make rapid strides. Until a man or woman is honored for acting independently, and indeed, for thinking out loud, the great mass of the people must continue to wear the opinions of predecessors and compatriots, just as the children of poor parents wear the old clothes of the elder members of the family. This analogy however is imperfect because old opinions fit too tightly, while old clothes set too loosely. We are constantly cramped by laws and customs made by our fathers. Our civil statutes and social customs only change when the compressed spirits of the people, groaning under the pressure, burst the fetters; and those bold spirits who first cry out from the over-

flowing bitterness of their cup, or their acute sense of sympathy and justice suffer a social martyrdom for which only the ultimate triumph of the idea and the blessing it confers on generations unborn, can yield an adequate compensation.

I have among my clippings a fugitive scrap which may properly find place here. It may be from an address by George William Curtis, or it may be from the printed lecture of somebody else, I do not remember, but it is good, and here it is:—

"It is only fair to consider the average of public opinion as it affects the right of private judgment. Its argument is always conceited and always mean. 'What,' it says, 'do you claim the right of self-opinion when all others think differently from you? Are you so proud and so stubborn as to put yourself in opposition to the whole world? Do you intend to reform the world? Here we are comfortably seated in our first-class train, and you come along to disturb us. You can accomplish nothing. You might as well try to melt the Arctic Sea with a lucifer match.' 'But I must see the truth.'—'Truth, truth,' grovels orthodoxy. 'What is truth, if it is not our opinion? Now, mark, we have the power, we are many. Do you want to lose your position? To resist is to die.' Well, it is imposing. Public opinion is a serpent, with a mean and hateful eye, and it goes upon its belly. It glides into every church; it coils up in every pew; it enters into every family; it runs up every staircase; it follows me to the platform, and when I sit down in a chair, its hateful folds are beneath me. But the fashionable creed is only the opinion of one man multiplied. Aggregation is sometimes force, but it is not always argument. Public opinion is only the opinion of a great many men, and is no more worthy of confidence than that of any single man among them."

With this paragraph I must close; I have no further apology to offer for the matter presented in Part III. The heart hath felt it—the pen hath committed it to paper—and the lead of the printer, more potent than that of the rifled warrior, hath impressed it in the pages of this book. May the kind spirit of our Father go with it, and if its influence be EVIL destroy it; but if its influence be GOOD, may He abundantly bless it and disseminate it.

THE MASKS MUST FINALLY COME OFF.

PART IV.

Suggestions for the Improvement of Popular Marriage, etc.

OPENING CHAPTER.

INTRODUCTION.

NOTWITHSTANDING monogamic, or what is sometimes erroneously denominated Christian marriage, is open to just criticism, as exhibited in Part III., it would be a much better institution than it now is, if religionists would cordially unite with Christian physiologists for its improvement. I know that monogamic marriage, according to its strict definition, means indissoluble marriage. But indissoluble marriage has never practically obtained foothold on this planet, unless it was in the times of the founders of Rome, and this supposition entertained by a few writers, I am disposed to discredit for reasons already given; nor is it best that monogamy in its strictest sense should ever prevail. It is contrary to nature that it should, and the naturalists, I think, might search the forests and waters of the earth in vain for any tribes or species of animals that rigidly maintain any such rule in their sexual relations, and there are plain physiological reasons why the human family

should not. Still we are in the habit of calling our system of marriage monogamic, and I will conform to the custom. Nothing can be more erroneous than to call it Christian, as Jesus was not the founder of *any* marriage system. It would be well for the reader before perusing this part to read Part III., and especially the chapter headed "History of Marriage," in order that any prejudices in favor of our present system, growing out of its supposed Divine origin may be dispelled; otherwise the right to suggest any thing for its improvement may be justly questioned, for certainly it would be little less than blasphemy, for us poor finite mortals to presume to improve on any of the works of Deity. If indeed our Creator or our Saviour was the founder of any particular form of marriage it is our duty to ransack both sacred and profane history to find it, and having found it, we should take it just as it was given to us without alteration or amendment. The results of the author's researches are such as are given in the "History of Marriage," and in the chapter headed "The Defects of Marriage," and having been led by these to believe that it is a human institution, he deems it to be the duty of all good and all wise men, to co-operate in effecting such amendments as will best conduce to the general welfare. Every medical writer, especially, who does not put forth effort in this direction, is guilty of an omission which reflects discredit upon his faithfulness as a physician, when it is considered for a moment how greatly marriage effects for good or evil, the happiness, health, and longevity of every individual who enters it. In this branch of our investigation, too, all who are desirous of upholding something approaching the monogamic system should feel particularly interested. If it be believed by any considerable number of Christian men and women that our prevailing marriage is the only true one, such persons more than all others, should join hands with the parson and doctor to perfect and popularize it, to the end that polygamy, complex marriage, and all other systems may enjoy but a brief existence. No progress can be made by opposing other systems, for in all violent opposition to them, the same as in religious persecution, "the blood of the martyrs is the seed of the church." Mormon polygamy and the results of individual and national opposition to it is a striking illustration. Driven from Nauvoo with the rifle and club of the mob, they have become as strong as a young nation on the shores of Salt Lake. The Communists were driven out of Putney, Vermont, to grow rich, strong, and respectable on the banks of Oneida Creek in New York. It is plain, therefore, that the true policy of the upholders of monogamy, is to concentrate their wisdom and strength upon perfecting their system, and making it if possible so attractive, that it will be forever the voluntary choice of the mass of intelligent mankind. There is nothing more glaringly palpable than the fact that there is an enormous defect in the present system of marriage, the remedying of

which has been sadly neglected in the physiological "dark ages," from which the civilized world, I trust, is gradually, if slowly, emerging. Says Mrs. Jameson in her "Winter Studies and Summer Rambles in Canada:"

"In conversing with a prelate and the missionaries on the spiritual and moral condition of his diocese, and these newly-settled regions in general, I learned many things which interested me much; and there was one thing discussed which especially surprised me. It was said that *two-thirds of the misery which came under the immediate notice of a popular clergyman, and to which he was called to minister, arose from the infelicity of the conjugal relations;* there was no question here of open immorality and discord, but simply of *infelicity* and *unfitness*. The same thing has been brought before me in *every country, every society*, in which I have been a sojourner and an observer; but I did not look to find it *so broadly placed before me here in America*, where the state of morals, as regards the two sexes, is comparatively pure; where the marriages are early, where conditions are equal, where the means of subsistence are abundant, where the women are much petted and considered by the men." By this we see, that matrimonial unhappiness is so almost universal as not to escape the notice of clergymen, whose profession affords less facilities for ascertaining the true conjugal condition of all classes of people, religious and irreligious, than that of the physician. Since the first publication of my book, in which the quotation from Mrs. Jameson appeared, a great many clergymen have spoken with me in reference to this same matter, and have given precisely the same testimony, but it is not necessary in this place to adduce facts and arguments, to prove that the world is full of connubial infelicity. There is no monogamic community in which there does not exist indubitable evidence of it. What we want is a remedy.

Many bold spirits who have tasted the bitterest dregs of matrimonial infelicity, are ready, nay, restlessly impatient, to overthrow entirely all institutions of marriage, inaugurate a system of free and promiscuous love, leaving the sexes without legal or social restraint, and to the dictates of their own individual impulses in the gratification of their amative desires and the perpetuation of the race. Others are as zealously advocating lenient divorce laws; so lenient indeed, as to allow men and women to marry and divorce at pleasure, without any outside meddling, until a congenial companionship can be formed, and then again to change this companionship whenever it becomes disagreeable, whether the causes be natural and potent or absolutely frivolous.

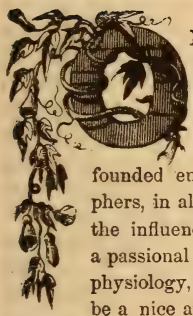
Such a system might better be called Digamy than Monogamy, and even if expedient (which, in the present condition of popular morals, is not probable), could not receive the sanction of this semi-conservative age. Others, still, there are, who, while they deplore the wide-spread wretched-

ness existing in matrimonial life, and perhaps experience its bitterness in a slight or great degree, occupy neutral ground, feeling an indefinable reverence for the present system, and still ready to adopt any new one which may be suggested, compatible with religion and social good order. And there is yet another class, more fortunate than the rest, who have accidentally formed a happy matrimonial alliance, or something approaching thereto, presently at least promising to be permanent, a majority of whom advocate rigid divorce laws, and egotistically imagine that all the matrimonial unhappiness in the world is only the result of stupidity or recklessness on the part of those entering into the contract of marriage. They consider parties to such alliances deserving of all the misery they have brought upon themselves, and selfishly fold their conservative arms, only to move them in defence of existing laws or the enactment of still stricter ones. Such men, however well versed in law and theology, are seldom physiologists, and are unwilling to open their eyes upon the disastrous effects which unhappy marriages are entailing upon the human race, by producing progeny, and progeny's progeny, sour in temper, unbalanced in mind, and sickly in body. They are surprised at the increase of crime, and the decrease of physical vigor among our young people, and sagely attribute the causes to all others than the real ones. The thought never strikes them that if marriage could only be properly regulated, we might hope, after a season, to rid the country of rogues by the prison, and that, so long as such incongruous unions take place between the sexes, we shall ever have need of iron bars and prison walls.

This Part, therefore, will be mainly devoted to the improvement of our present system of marriage, with occasional chapters of matter appertaining to society as it presently exists. If any thing is encountered by the reader seemingly in conflict with the suggestions and opinions given in Part III., let it be remembered that in this portion of my work I am advising and recommending means for improving the system of marriage and society presently prevailing in Christendom, without alarming the conservative mind by proposing any very strikingly radical changes. Some of the proposed changes may appear novel at first glance, but on reflection they must commend themselves to the judgment of all intelligent people. After listening to these preliminary whispers, the reader is allowed to ramble through the remaining pages presented in this Part.

CHAPTER II.

ADAPTATION IN MARRIAGE.



ONE of the most important matters in forming a matrimonial alliance, is to secure at the outset, at least, entire adaptation, both mental and physical. Many reformers run wild on what they term "Platonic love," and advocate Platonic marriages, or such as are founded entirely on elevated mental affinity. Not a few philosophers, in all ages, have taken the opposite extreme, and ignored the influence of all affection between the sexes, excepting that of a passional nature. Neither of these extremes can, in the light of physiology, be regarded as right. In marriage, there should always be a nice and equal adjustment of the Platonic and passional elements in the affections, which attract and bind the pair together. Friendship is one thing; true love another. These two sentiments should be so blended in marriage as to make what might be called a compound sentiment.

Observation teaches us that truly happy marriages cannot exist when only Platonic love unites the sexes. Almost every community exhibits some marriages based on "Platonic love," but neither their offspring, nor their constancy, indicate that oneness of soul, which characterizes those unions in which both physical and mental adaptation have been realized. Then, on the other hand, it is degrading to the human being, created in the image of God, and endowed with an immortal spark of Divinity, to claim that love is but the exclusive offspring of passion, and that man and woman should marry or cohabit under the single influence of that feeling which prompts the brute creation to mate and perpetuate its species. Human beings are animals, and possess many inclinations in common with those of a lower type. Necessity for food and a desire for sexual pleasure, are shared by all animals, no less by man than by those over which the "Lords of Creation" rule. But human beings are distinguished from the lower order of animals, by intellectual and superior social endowments, consequently, mental and social fitness should be considered as well as physical adaptation, in the sexual relations of men and women. Not, however, by any

means to the neglect of the latter, any more than if man were not gifted with reason and elevated social faculties, for his animal desires, and I might almost say necessities, are not destroyed by the presence of these crowning endowments.

Reciprocity in the sexual relation is *indispensable* to the contentment and happiness of the husband and wife. O. S. Fowler, in a little work entitled "Love and Parentage," has said some very excellent things on this subject, and to show the necessity of physical adaptation, I cannot do better than to quote extensively from his remarks upon it.

"Reciprocity," says Mr. Fowler, "is a constituent ingredient in its very nature. Without it neither can ever be happy in either love or wedlock. Its absence is misery to the ardor of the one, and repugnance to the coldness of the other. A cardinal law of both love and connubial bliss requires, that the more tender the affection of either, the more cordially should it be reciprocated by the other. * * * * The exalted pleasure appertaining to the parental function constitutes the one essential embodiment of love, as well as the principal object and ingredient in marriage. Its anticipation embodies the chief incentive of the former, and the main motive of the latter. What other motive does or should prompt either? Nothing but this *single* legitimate object of marriage, and only consummation and constituent element of love. What else does the very etymology of matrimony signify? And in what consists the marriage vow, but in the implied and fully recognized act of covenanting with each other to participate together in this ultimate repast of love? Candidates for matrimony! what but this do you seek and proffer in forming this alliance? Affected prudishness may pretend to frown upon this home truth; but viewed in whatever light you please, the long and short, warp and woof, and sole embodiment, of both love and matrimony—the one legitimate element, end, motive, and object desired and prompted—of either separately and of both collectively—consists in the anticipation and pledging of each to participate this function of love with the other. This is the origin of the marriage RITES. The bridegroom justly thinks himself *entitled* to these rites, because the very act of the bride in becoming his wife consists simply in a surrender of her celibacy, and a pledge to partake in this parental function. And the value set by either party on matrimony is mainly the price set on this repast. *Other advantages grow incidentally out of marriage, but are only incidental.* All depend on this—are its satellites—and grow legitimately out of it.

"This being 'THE tie that binds,' the absence of reciprocity here is of course *the* bone of contention. If similarity in other respects is essential to love, how ALL ESSENTIAL is this the very essence of the marriage covenant and contract? Matrimonial felicity can no more be had without reciprocity and mutual pleasure here, than noonday without the sun, nor can discord

co-exist with reciprocity here any more than darkness and sunshine; because they who cannot make each other happy in this, the *ultimatum* of love and marriage, cannot in minor matters; while those who can, will find all the minor causes of discord drowned in this key-note of concord. The *happiness* conferred by each on the other being the sole occasion of love, and reciprocity here being the heart's-core of all the happiness of both love and wedlock—their basis, and frame-work, and superstructure, and *all in all—therefore*, those who are qualified to confer on each other this *summum bonum* of matrimonial felicity, are bound together by the strongest bond of union connected with our nature; whilst those who cannot both confer and receive mutual pleasure in this respect cannot possibly be happy in married life, and consequently cannot possibly love each other; and, therefore, should never enter together the sacred inclosure of wedlock. On nothing does the bridegroom set an equal value. All else in married life is of little value to him compared with reciprocity and happiness here. *This expected pleasure alone prompts marriage.* Oh! if I could catch the matrimonial ear of the whole world, I would say, in the language of this *law of love*, to the blooming bride as she enters upon the nuptial relations: By all the happiness you are capable of conferring and receiving in married life, note every invitation to this banquet of love, and cordially respond. Coldness or squeamishness in love's repast, will dampen your consort's pleasure, and therefore his love, while your cold repulse or petulant refusal persisted in, will be the death-blow of matrimonial felicity to you both—a blasting siroceo to his fondest hopes; for it will force him to drink the mere dregs of the marriage cup, in lieu of the delicious nectar he had so fondly expected to sip at the hymeneal altar. But, if you watch the rising desires of love, and bestow the welcome embrace, you re-enkindle its flame, and crown your blessed union with the complete fruition of this the embodiment of all its pleasures.

"But nothing will sting him so severely with disappointment, despair, and hatred, as unsatisfied desire. The reason is this. As already seen, amativeness, the cerebral organ of this passion, bears the most intimate relation to the whole body, and the entire mentality, as the means of the propagation of both. Hence, its gratification abates that burning fever consequent on its unsatisfied cravings, and calms down that irritability of the animal propensities, which always necessarily accompanies its reversed and painful action.

"The precise physiological principle involved," continues Mr. Fowler, "is, summarily this: amativeness bears the most intimate reciprocal relation possible to the body, in order to its propagation, and also to the animal propensities. Hence, gratification sates that feverish, morbid, irritable, and depraved state of both this organ and of the whole of the animal propensi-

ties, among which it is situated; but its *denial*, fires up to their highest pitch of abnormal, and therefore depraved, manifestation, the whole of the animal region, the body included; and thus produces sin and misery in their most aggravated forms. Fully to enforce this cardinal doctrine, requires the full exposition of that fundamental law of relation subsisting between the various states of amativeness and of the animal propensities. But, assuming this point, behold in it the cause of that bitter hatred and implacable revenge always and necessarily consequent on the cold refusal in place of the soul-inspiring expectation of a cordial welcome!

"This doctrine of the necessity of reciprocity must commend itself to all who have experience concerning it, and requires no other proof; while the uninitiated will find ample proof in the universal fact that those husbands and wives, either one of whom went reluctantly to the hymeneal altar, never lived happily together. Scrutinize all the cases in which either party was over-persuaded by the importunity of the other, or by officious parents or friends, and every identical one, except those in which the requisite reciprocity has been subsequently re-established, which are rare, will be found to have resulted in misery to both. Let this principle and fact effectually warn all against persuading or being persuaded to marry against their feelings. Ardent love in one can never compensate for the loss of it in the other, but only increases the disparity. Warmth in one and coldness in the other is as ice to fire. Reciprocity is indispensable. Those who love each other well enough to marry will need no urging, but will literally *rush* into each other's arms. Then let all beware how they marry unless both LOVE AND ARE BELOVED; because love in one and not in the other is a breach of love's cardinal requisitions, and therefore can never render either happy, but must, in the very nature of things, torment both for life. And let those who are married put forth their utmost endeavors to reinstate, as far as possible, reciprocity in this vital requisition of matrimonial felicity. A few facts:

"From the very hour that Nero's 'wanton dalliance' and desired incest with his mother was interrupted, he plotted her death, and consummated that most revolting matricide with impatient haste and the most infamous cruelty. Potiphar's wife hated Joseph as cordially after he refused her this indulgence, as she loved him before, and solely in CONSEQUENCE of such refusal. This alone converted the frenzy of her love into revenge equally frantic. The story of Amnon and Tamar (2 Sam. xiii.) also establishes and illustrates our position. An enamored widow in New York, similarly refused by an amorous man, because of his filial regard for her venerated husband, from that hour to this, has pursued him with all the artful vengeance of a human fiend. The details of this case are full of thrilling interest. One of the recent cases of *crim. con.* in New York, grew out of a husband's conscientious refusal to gratify his wife in this respect, while

fulfilling her maternal relations. This roused her worst passions, and she sought with a paramour what she was denied in wedlock. In short, does this law of love, and law of mind, that refused indulgence engenders hatred, require further proof, however similar in other respects; or that reciprocity here is the olive-branch of connubial peace, however illy matched in other respects? Need we prove that coldness in the one and ardor in the other, is 'hope deferred' to the former, and repulsiveness to the latter, which necessarily blasts their mutual happiness, and of course their love? Is not this SETTLED TRUTH—the very summing up of this whole matter?

"Forbearing reader! Condemn not our freedom; because our subject is fraught with the very life and death of all matrimonial felicity. It is one of MIGHTY moment—the great sandbank of matrimonial shipwreck—yet rarely developed. Its chagrined victims rarely tell the fatal secret. It remains to be disclosed by SCIENCE. Besides, reader, you yourself may require to know what you can learn probably nowhere else. Accept, then, as you prize domestic happiness, the following matrimonial *life-preservers*, in the form of preparatory advice, to all whom it may concern:—

"First, to the reluctant wife! For you to *yield*, is to conquer. By showing a desire to do all you can to oblige a beseeching husband, you throw yourself on his *generosity*, and thereby quell that desire which coldness or refusal would only aggravate. Your cheerful submission to what he knows to be disagreeable, at once excites his pity and gratitude, and thus awakens his higher faculties in your behalf, and subdues desire; because, how *can* he who dotes on you take pleasure in what occasions you pain? He takes your *will* for the deed, and loves you therefore too well to insist on so delicate a matter unless agreeable to you also, or to feast himself at your expense. Compliance is a *sovereign* remedy for his importunity, because it *kills his desires*. Remember, you must always yield *cheerfully*, and with a view to *please him*, or else the whole effect will be lost. Never prove remiss, but do all you can to conform. Thereby you will lay your husband under the highest possible obligations of love and gratitude; whereas the unkind *refusal* begets increased importunity, and makes him *insist on his rights*, and threaten you with vengeance if you dare refuse. Abundant excuse, such as the most unreasonable demand on his part, and utter inability on yours, alone should warrant your refusal.

"Husbands! It is now your turn. To *promote desire* is your only plan. To excite those feelings which alone can render your wishes acceptable to the partner of your love, will obviate present repugnance, and render both happy in what otherwise would be a torment to both. *Cultivate the defective faculty.* Apply those perpetual stimulants which you alone can employ, and your wife, if a true woman, will necessarily respond. This element is of right, at least always *ought* to be, comparatively dormant at marriage, and

therefore requires to be *cultivated* before its full activity can reasonably be expected. This, and this *alone*, can secure your desired boon—alone can obviate the difficulty. It is not for her, but for *you*, to excite *her* to willingness.

"But, mark: this can *never* be done by *blaming* her. By soft words and tender manners *only*. And yet, many husbands think to *drive* their wives to this tender repast by *blaming* them for delays. This is the very last thing that should be done; because this produces disaffection, and disaffection weakens the remaining fragment of love. By thus provoking desire, he can frequently obviate barrenness, which is often caused by want of interest in her. Excite this interest, and you thereby secure offspring—the one object of marriage and end effected by love. In short, *provoke her to love.*"

Although the foregoing quotations from Mr. Fowler's interesting little work answer very well to show the necessity of physical and amative adaptation, I must disagree with him in the remark that "all minor causes of discord are drowned in this key-note of concord." Entire mental adaptation, is of all importance, in conjunction with physical adaptation, to effect a happy marriage, and, in justice to Mr. F., I should state that he advocates substantially the same views in other portions of his work. Without something of a correspondence in the moral and religious faculties, and congeniality in the social feelings, conversational and fireside enjoyments are unknown to the married couple. There should indeed be such an even balance of the platonic and passional elements, as to preserve constant harmony; platonic love stepping in, when passional love is made latent by gratification. Sexual connection it should be remembered equalizes the magnetic elements of the pair, so that magnetic or physical attraction is for a time suspended after it.

What is Mental Adaptation?

Mental adaptation, in marriage, consists in at least an approximate correspondence in the tastes, sentiments, and propensities of the husband and wife. The organs of Conscientiousness (15), Benevolence (19), Veneration (18), Hope (16), and Spirituality (17), as represented in the annexed cut, impart to the human mind a religious character. Now, the possession of high moral and religious sentiments by one, and a total destitution of them in the other, is frequently the cause of matrimonial discords and sometimes separations. How can a pious wife enjoy the society of a husband who ridicules, and perhaps forbids, her devotional exercises? How can a devotional husband love a wife who neither sympathizes with, nor participates in, his religious sentiments, while, by precept and example, she trains up his children regardless of his cherished principles?

The organ of inhabitiveness (4), when largely developed in the human head, gives attachment to home and love of country. A wife, possessing a full development of this organ, can never live happily with a husband whose inhabitiveness is small and locality (31) large. He will ever be on the move, like the rolling stone, and the wife must sacrifice her love of home and a permanent location by following in his wake, or else let him go, and content herself in loneliness. Some wives are rendered miserable by the itinerant propensities of their husbands, who are ever changing their place of residence, and hardly remain long enough in one locality to get the curtains up and carpets down. Sometimes it is the reverse, the wife having the roving propensity, and her husband, unless like her in this respect, is annoyed to death with her discontentment.

Fig. 173.

MENTAL ORGANIZATION.

The organ of philoprogenitiveness (2) makes its possessor very fond of children. If the wife has this faculty small, and the husband large, the latter is decidedly inclined to find fault with her management of the children, and bickerings arise from this cause. He is passionately fond of his child, while she is inclined to abuse it. She considers children great plagues, and often tries to destroy them before birth, while his tender soul shrinks from the horrible crime of infanticide. As the principal training and care of the child devolves upon the mother, large philoprogenitiveness in the father is not so essential as in the mother. But there is always "war in the wigwam" when the father possesses this faculty large and the mother small.

Adhesiveness (3) is an organ which begets powerful attachments. It is the chief prompter of platonic love. It leads persons to seek the society of those who have similar mental proclivities, and seals congenial acquaintance with enduring friendship. If the husband lacks this quality of mind, the wife ever laments his want of fraternal affection—feels that he married her more for the gratification of his animal desires than for her society. If the wife is destitute of this organ, she is generally cold and repulsive, except when aroused by amative excitement. The home circle is robbed of half its attractions, and the husband, unless immersed in business, not unfrequently becomes the patron of the bar-room or the gaming-table.

Amativeness (1) is the organ which seeks physical adaptation, and gives rise to passional love. Its nature and office are embodied in what has been previously remarked on reciprocity in love. Mr. L. N. Fowler remarks: "From my extensive observations and knowledge, gained by fifteen years' travel in all parts of the country, and becoming acquainted with families from various parts of the world, I have at times almost arrived at the conclusion that one-half, if not more, of all difficulties existing between husbands and wives, and premature deaths, are produced by a want of proper adaptation to each other in this organ." By making the amendment, want of this and *physical adaptation*, I agree with Mr. Fowler.

Many husbands and wives possess an equal development of the organ of amativeness, and still have not the necessary physical adaptation to make each other happy in its gratification. Two persons may possess an equal development of the organ of adhesiveness, and yet fail to become friends for want of mental congeniality in other respects. So, also, equality in the organ of amativeness does not *perfect* passional love. The latter is the offspring of amative and physical adaptation.

The intellectual faculties, which need not here be enumerated, impart keen perception and reflection—lead their possessor to perceive the existence and qualities of external objects, and their relations, and to compare, judge, and discriminate. In marriage, the existence of diversity in these organs in the male and female head rather tends to increase than to destroy not only mental, but physical adaptation, provided there is aggregative equality; or, in other words, provided the perceptive brain is equally as well cultivated as the reflective one. The possession of a perceptive brain by the wife, and a reflective one by the husband, or *vice versa*, will not engender disrespect, but rather greater appreciation of each other's abilities, while the effect of this diversity upon the offspring is beneficial, because it not only endows it with the faculties of each, but even to some degree increases its vital tenacity. It will be observed in the next essay that this diversity in the foreheads favors physical adaptation.

The intellectual powers of each, however, should be about equal, however diverse in character; no wife can respect a husband who is her inferior, and without respect there can be no real love. Nor can an intelligent husband, enjoy the society of a wife who is ignorant and perhaps uncouth. He may be led by the momentary influence of passion to marry such a woman, but he can never truly respect or love her. He will not only avoid her society himself, but he will feel dissatisfied to have his children brought up under her influence.

"What can be expected but disappointment and repentance," says Dr. Johnson, "from a choice made in the immaturity of youth, in the ardor of desire, without judgment, without foresight, without inquiry after confor-

mity of opinions, similarity of manners, rectitude of judgment, or purity of sentiment? Such is the common process of marriage. A youth and maiden meeting by chance, or brought together by artifice, exchange glances, reciprocate civilities, go home and dream of one another. Having little to divert attention or diversify thought, they find themselves uneasy when they are apart, and therefore conclude that they shall be happy together. They marry, and discover what nothing but voluntary blindness before had concealed; they wear out life in altercations and charge nature with cruelty."

Passional love, which warms up only at intervals, cannot long render the pair blind to mental disparity. And then too, when passion has been the governing attraction, and age cools down the impulses of early manhood and womanhood, nothing is left to render their matrimonial relations even tolerable. Therefore, to contract a happy marriage or any approach thereto, in addition to that amatorial and physical adaptation necessary to promote between two persons of opposite sex strong passional love, there must also exist that mental and moral congeniality, which produces powerful friendship—friendship which would be deep and lasting were sexual considerations unthought of.

What is Physical Adaptation?

Physical adaptation in marriage consists in part of a perfect dissimilarity in the electrical conditions of the husband and wife. I have shown in an essay commencing on page 622, that every person possesses electricity peculiar to him or herself, and this I have denominated *Individual Electricity*. Now, however large the organ of amativeness may be in both the male and female head, the amount of enjoyment which is realized in the sexual embrace, must depend upon the electrical differences existing between the two. If the quantity and quality of this element is nearly alike in both, then will intercourse be insipid, if not painful, because the sensitive nerves centering in the organs of procreation must be acted upon by an electrical element foreign to their own, in order to produce pleasurable sensations. Any limited enjoyment which may be derived by the union of two of similar electrical conditions, must arise entirely from the action of the chemical and frictional electricities, as explained in the essay referred to.

Nor is it sufficient that one should be positively and the other negatively electrified. The element must be dissimilar in *quality* as well as in quantity. The nature of the current produced by the friction of glass on silk, is unlike that generated by a galvanic battery; electro-magnetism is not like galvanism; the electricity of a thunder-storm is unlike any of these; and so do the electricities of individuals differ in their nature in the same ratio that the latter differ in their physical conformations. Each person generates and

imparts an animal electrical element peculiar to his or her organization, and it is safe to advise every man and woman who, during courtship, do not experience the peculiar warmth and nervous exhilaration which different magnetisms induce when in each other's company, to dismiss all idea of uniting in marriage. No intelligent girl or boy who has arrived at the age of pubescence, is so inexperienced as not to know what I mean. The emotions which arise when two of opposite sex magnetically adapted associate, are known to all above the age of pubescence, whose sexual organs have not been paralyzed by deferred exercise, or disease. Many mistakenly marry without regard to this experience, take a companion for social, pecuniary, or other considerations, with whom no such emotions have been felt, leaving, in many instances with grief, the lover with whom such attraction exists. In cases where the sexual organs have become dormant by non-use, or disease, it may be safe to marry without feeling sexual desire for a companion, but not so, if the magnetic bodily warmth and physical and mental exhilaration, which must always arise in social contact with one magnetically adapted, is not felt. The simple custom of shaking hands, enables one to determine pretty well who are, and who are not magnetically adapted; a courtship may better not begin unless this condition may be supposed to be favorable. But if it begin, it may better be discontinued, if after several social interviews it is discovered that no great magnetic attraction exists, or, if it existed at the beginning, it is found to have subsided.

I said that physical adaptation in marriage consisted *in part* of dissimilar electrical conditions. These conditions cannot exist permanently without temperamental adaptation. Temporary, and, in some instances, quite intense magnetic attraction, may be felt between two persons of similar temperament; but it cannot, in any instance, be lasting. This leads us to the question—What is, then, *temperamental adaptation?* I reply—it is a condition based upon entire physical diversity between a man and woman. The material or atomic ingredients of their bodies must be, in a measure, unlike, and must also exist in diverse form. The late Doctor William Byrd Powell, of Kentucky, who devoted nearly his whole life to the study of the temperaments, and who became so proficient as to be able to tell by the shape of a human skull the complexion of hair, eye, and skin of the subject when living, shall be selected as our authority in regard to the temperaments. About six or seven years ago, the Rev. Mr. Ballou, of New York, called my attention to some papers by Doctor Powell upon the subject of temperaments. I thought what I had myself written at different times upon them, covered the whole ground, but upon making myself further acquainted with the investigations of Doctor P. in this direction, I found that he was a master, and I but a student in this branch of physiological science. I have

since given additional attention to the study of the temperaments, as treated by him in various scientific papers, and in a work entitled "Natural History of the Human Temperaments," etc., by the same author, and I have found that, by applying his rules, I can determine with almost mathematical certainty, what may reasonably be expected in regard to happiness and progeny whenever I see a man and woman entering into a matrimonial alliance. I will say more about this before I conclude this essay; for the present we will turn to Dr. Powell's classification and description of the temperaments.

First, the Vital Temperaments:—

These are known respectively by the names SANGUINE and BILIOUS. "The sanguine temperament," remarks Dr. Powell, "is the tonic temperament of Dr. Darwin, and the mixed one of Dr. F. Thomas, of France; but I prefer to retain the denomination of Hippocrates. In the white variety of our species, this temperament is distinguished by light hair, fair skin, and grayish blue eyes. In both the white and black variety, it is distinguished by firm flesh and strong and full pulse, a forehead that recedes and contracts latterly as it rises; the nose is generally above the average in size, and has the Roman form in well-defined representatives, but in the females the nose has the Grecian form, the lips close beautifully, the upper being the more prominent. This class," continues Dr. Powell, "has, in every historic age of our species, furnished the most admired models of the human form, and I am much inclined to the opinion that human perfection, in all of its aspects, is more nearly achieved in this than in any other class."

Fig. 174.

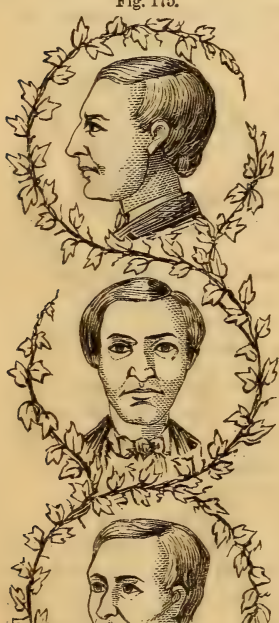
SANGUINE TEMPERAMENT.

This writer puts forward General Washington and the Hon. Edward Everett as excellent representatives of this temperament. The illustrations herein given are drawn from the imagination, to present to the mind, as fully as possible, marked representatives of the temperaments so far as the facial and cranial conformation can be made to indicate them. In the annexed cut, Fig. 174, we have, at the top a profile view, in

the centre a front view, and at the bottom a three-quarters view of the head of a female of the sanguine temperament.

"The bilious temperament is distinguished by a harshly-defined outline of the person and features. The muscular system is dense or firm, and capable of highly active movements. The bony system is comparatively largely developed. The hair is black, coarse, and often curly. The eyes are a dark brown, and the complexion is dark and sallow. The head is of average size, and is developed obliquely, upwardly, and backwardly, so that the occipital and frontal bones are considerably parallel. The forehead, as with the sanguine, recedes, and contracts laterally as it rises. The nose is usually above medium size, and, in strongly-marked representatives, it is aquiline or Roman in form, but sometimes it has the Grecian form; in females, this is its usual form. A large aquiline or Roman nose is a highly masculine feature, and on a woman's face it is as undesirable as a large beard.

Fig. 175.

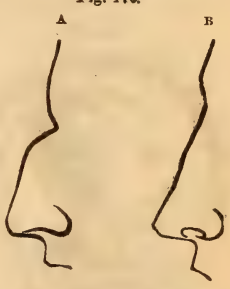


BILIOUS TEMPERAMENT.

"There is a variety of this temperament, which hitherto has been regarded as the highest grade of the sanguine temperament. It is distinguished from the preceding by red hair, a florid complexion, and, generally, lightly-grayish blue eyes. This variety is thus produced: progenitors of the dark variety, by emigrating from a warm to a colder climate, have their constitutions so modified that the children born to them after their emigration, will have red hair, a florid complexion, etc. Dr. Pritchard, the ethnologist, informs us that the progeny of those dark-complexioned Jews, who emigrated from Palestine to Northern Germany, became distinguished for their florid complexions and bushy red beards. I have observed several instances of dark, bilious parents, who, by emigrating from Louisiana to Ohio and Pennsylvania, had afterward children with red hair and a florid complexion. This change in the human constitution, resulting from a change of climate, appears to be similar to that which is effected in birds of a dark plumage by the climate of Siberia. If one of our wild turkeys were taken to Siberia, he would, in the

winter, become white; but I suspect that he would still be a turkey; and so I regard as bilious, the florid children of dark, bilious parents. This change appears to be confined to the dermal system, and has for its object the adaptation of the animal to the climate. Between the dark and florid varieties of this constitution I have perceived no difference, either mentally, therapeutically, or matrimonially. In all instances in which one would render the marriage compatible, so would the other. I denominate this florid condition the Xanthous, or, by contraction, the Xantho-bilious. As illustrations of the dark bilious, I may cite Gustavus Adolphus, king of Sweden, a good king and an able general; Francis I., king of France; Pizarro, conqueror of Peru. And of the Xantho-bilious, Alexander the Great, and Ex-president Thomas Jefferson."

Fig. 176.



I give, in Fig. 175, facial and cranial illustrations of masculine representatives of the bilious temperament, the top being a profile, the centre a front, and the lower one a three-quarters view. As some of my readers may never have thought of what constitutes a Roman nose, or the outline of a Grecian nose, I insert the two diagrams, A and B, Fig 176, as illustrations, A being the Roman, and B the Grecian outline.

Second, the Non-Vital Temperaments:—

Under this head, Dr. Powell classed the lymphatic temperament, and another named by himself "Encephalic." "The lymphatic temperament," he says, "has no distinguishing complexion. It may be either fair or dark. Nevertheless, it is amply distinguished by a large and globular head, thick lips, ponderous cheeks, a pug-nose, sleepy-looking eyes, a large and amorphous person, which may be likened to a human skin filled with water. The person is nearly bereft of hair. The pulse is small and feeble. The surface of the body is cool, because of the constant evaporation from it. All the muscular movements are slow. Although this condition, when highly developed, is greatly disgusting, yet, as an element of humanity, it is indispensable to civilization. Very many of the most distinguished men of our race have been compounded of two or three of the temperaments, and this is usually one of them. In the constitution of Daniel Webster it constituted about thirty-three per cent.; in the first Napoleon and Cromwell about twenty-five per cent., relatively; in Peter the Great, thirty-three per cent.

"The most perfect representatives of this constitution obtain in China

and Holland, and it greatly explains the patient industry of these peoples. Outside of the medical profession, people generally have but a confused idea of lymph. Well, it is neither flesh nor fat. It is the fluid or aqueous portion of the blood, or that fluid which is seen to escape from a blister when opened. It contains in solution both soda and lime.

"So few of this class become distinguished that it is difficult to cite illustrations of it. I can, however, cite one who is favorably known to fame: viz., Socrates; but the repletion with him was not so great nor so disgusting as it frequently is.

"It may be instructive to remark, that lymph is greatly less incompatible with both mental and physical action than fat. Hence, we find that both the Chinese and Hollanders are highly efficient. Fat renders less active and efficient all the human faculties; but lymph, if not too great, promotes activity—appears to be a lubricator." In Fig. 177, I present a profile, front, and three-quarters view of a female head of a lymphatic temperament, arranged in the order in which I name them.

Fig. 177.

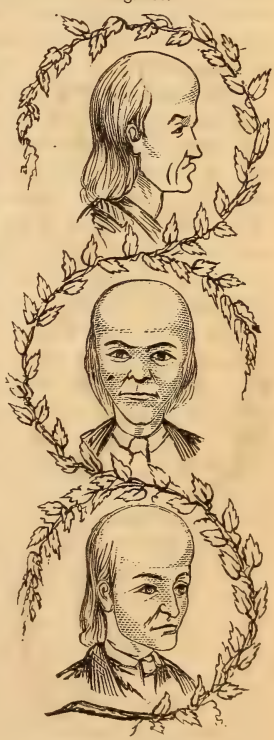
LYMPHATIC TEMPERAMENT.

"The encephalic temperament," remarks Dr. Powell, "like the lymphatic, has no diagnostic, or distinguishing complexion. It may be either fair or dark. Nevertheless, it is amply distinguished by a relatively large and quadrangular cerebrum, a small and contracted cerebellum, a large and massive forehead, much expanded superiorly, or above the temples. The nose is small, and most generally celestial or recurved. The lips are thin and flexible, the lower being the more prominent. The chin is small and pointed. The thorax and abdomen are small. The pulse is small and feeble. The muscles are small, feeble, and flaccid. All the functions incidental to life, except absorption, are feebly and tardily manifested. A high endowment of the preceding temperament excites disgust, but this pity. Although this temperament, when highly developed, is greatly useless, yet in combination with the others, it contributes largely to the production of the most gifted and distinguished characters of our species. Indeed, a

highly-advanced civilization is, I think, impossible without it. People of this class are capable of profound thought and emotion, but not of powerful; and further, they are very liable to monomania. Illustrations of this temperament, like the lymphatic, are very few. I can cite, however, the Rev. Dr. Rheinstadt, a recluse and scholar of Switzerland; Lorenzo de Medici; Blaize Pascal; the late Edgar A. Poe, who, for his age, was a fair illustration."

In the annexed Fig. 178, I present a profile, front, and three-quarters view of a male of this temperament. They may be regarded as somewhat exaggerated types, and still the top one is really a very correct profile of the Rev. Dr. Rheinstadt. I desire to make the illustrations as marked as possible in giving what might be regarded as a pure representative of this temperament.

Fig. 178.



ENCEPHALIC TEMPERAMENT.

It is proper to remark here, that Dr. Powell regarded the non-vital temperaments as secondary, and to have resulted from influences incidental to civilization. He considered the bilious and sanguine as the primitive temperaments, or those which presented themselves exclusively in the human family in its primitive state. "The non-vital temperaments," he remarked, "were not native to humanity, nor could they strictly be regarded as temperaments; but, as physiologists have always so treated of the lymphatic, and as the other is essentially like unto it, and further, as they are normal under the circumstances of their existence, and conform to all the laws of the temperaments," he thought "it best to continue to regard them as temperaments. The fact as to how they are regarded matters nothing provided we understand them."

"I assume," this author further remarked, "wealth to be a result of civilization, because it is universally conceded to be. Wealth induces a relaxation from toil, and induces many indulgences which enervate the vital forces, thus inducing a lymphatic repletion of the cellular tissue. In this wise I have observed many people to become considerably lymphatic in a few years, and this condition,

when produced, if only to a very moderate extent, becomes entailable, in the form of a lymphatic diathesis; and thus this condition becomes multiplied and disseminated. Our German emigrants appear to bring this diathesis with them, and by the use of ale and beer it is rapidly developed. The development of this condition is greatly promoted by a humid atmosphere; and hence the greatly lymphatic condition of the people of Holland and China. The humidity of the atmosphere of the gulf-coast of Louisiana and Mexico is doing for the people of these countries what was long since done for the Chinese and Hollanders. Fully developed illustrations of this condition are very few and far between in our country. A few years since I saw one in Pennsylvania in the person of a good-looking young woman. She was so lymphatic that she could not sustain her own weight in a standing position.

"This condition is purely adjunctive—the accumulation of lymph in a vital temperament; it is, therefore, apparent that it is neither elementary nor primitive. It is also seen why this condition has no diagnostic complexion. If founded on the sanguine temperament, the complexion will be fair. English physiologists describe this temperament as having a fair complexion, but this is because in the north of Europe the sanguine temperament generally prevails, and the lymphatic there is founded on it; but in the south of Europe the bilious temperament prevails, and those physiologists who have observed this condition only in the south of Europe describe it as having a dark complexion; but none of them appear to understand the essential condition of this constitution. The cognomen of lymphatic is not given to this condition till the lymphatic repletion obliterates all the indices of the fundamental condition except the complexion. It is now understood why the complexion of this temperament may be either fair or dark."

How is the encephalic induced? "Care, responsibility, mental activity generally, and sedentary habits," continues our authority, "are as exclusively incidental to civilization as wealth is, and from them results the condition I denominate the encephalic temperament. The three former agents directly develop the cerebrum or nervous system of relation, to the neglect of the cerebellum. The cerebellum being the nervous system of animal life, the fourth agent, sedentary habits, directly reduce it, and thus an inequilibrium is induced between the two systems, and of that character which constitutes the condition in question. I have observed this condition to be rapidly developed in sanguine, bilious, and sanguine-bilious young men, who respectively held responsible positions in banking and commercial houses.

"As with the lymphatic temperament, so with this—its complexion results from its fundamental element or condition. The title of encephalic does not apply till the indices of the fundamental condition are obliterated by the change, except the complexion. Although the lymphatic and ence-

phalic conditions are, in the abstract, exceedingly unlike, yet in one particular they are as exceedingly similar—both consist in a feeble vitality; consequently, in reference to the procreative function, they are very similar—so similar that either may replace the other. Nevertheless I regard them both as being exclusively physiological, and not only indispensable to the achievements of civilization, but to an increased average of longevity of civilized man." Dr. Powell continues by saying that "it was, however, the resulting of these two conditions, from influences incidental to civilization, that rendered our instincts an insufficient guide in relation to marriage in civilized society; and hence, a science of marriage became as indispensable to civilization as any other science incidental to it. Indeed, much more so, inasmuch as the perpetuity of the civilized species is involved in the marriage institution. The rapid increase of idiocy, imbecility, and scrofulous forms of disease, even in our country, most unmistakably indicates that the discovery of the science of marriage was not premature."

It should not be inferred by the non-professional mind, because I have given female illustrations of the sanguine and lymphatic temperaments, that these especially appertain to that sex, or that the bilious and encephalic, exhibit characteristics found exclusively among men. Each sex shares with the other in manifestations of different temperaments. They are only so presented to give variety to the illustrations. Now, in all cases where the temperament is nearly or quite pure, or marked, any intelligent reader can judge for himself or herself, who would be a compatible companion by observing the following rules:—

Rule First.—*The non-vital temperaments should not intermarry.* That is, a person of the lymphatic temperament, should not marry one of the same temperament, or one of the encephalic temperament. Reversed, an individual of the encephalic temperament, should not marry one of the same, or one of the lymphatic temperament. I thus turn the rule about, so that it cannot be misunderstood by those of the dullest comprehension. A violation of this rule produces the following results:—In course of time dissatisfaction with each other, and a longing for the society and physical contact of those who are physically better adapted; barrenness, or in many more cases, what is worse, miscarriages or children who die in infancy or childhood, or at the outside soon after reaching adult age. These penalties are *inevitable* if two persons of clearly marked non-vital temperaments come together in marriage. The designation "non-vital," does not signify that those possessing either of the temperaments coming under this head may not themselves be healthy and long-lived; but it does mean, that when united in marriage they cannot impart vital tenacity to offspring.

Rule Second.—The intermarriage of the vital temperaments, to the

extent that one of the bilious temperaments may unite with one of the sanguine, is admissible, though not as favorable as the marriage of one of these temperaments with one having a good share of one of the non-vital temperaments. The marriage of one of the sanguine with another of the sanguine, or one of the bilious with another of the bilious temperament, is incompatible. The penalty for the violation of this rule is mutual dissatisfaction, sooner or later, between husband and wife, and the production of offspring liable to inflammatory, nervous, and febrile diseases, nor is longevity usually characteristic of the offspring of this sort of marriage. When neither of the non-vital temperaments is exhibited on one side, it will be found that the offspring have too much *intensity*, and where this quality exists excessively, it makes the constitution less enduring, and the children of such parents are more subject to nervous disorders and lunacy.

Rule Third.—If of the sanguine temperament, marry one having one-third or more of either of the non-vital temperaments, the balance being of the bilious; if of the bilious temperament, marry one having at least one-third of either of the non-vital temperaments, the balance being of the sanguine. If of the lymphatic temperament, marry one having not less than one-half of one or both of the vital temperaments, with eyes, hair, and skin of opposite complexion to your own; if of the encephalic temperament, marry one having not less than one-half of one or both of the vital temperaments, with complexion of hair, eyes, and skin opposite your own.

The foregoing rules would seem to be plain enough for a guide in cases where there is not too much of a combination of all the temperaments in one person. In some cases the combinations may be such that a novice could not, if his life depended upon it, tell which one of the temperaments predominated in any given case of this class. These combinations are, however, faithfully described by Dr. Powell, who remarked, that as he could distinguish them readily in denuded skulls, others, without his experience and observation, might do so with the living subjects before them, if the following descriptions are sufficiently studied:—

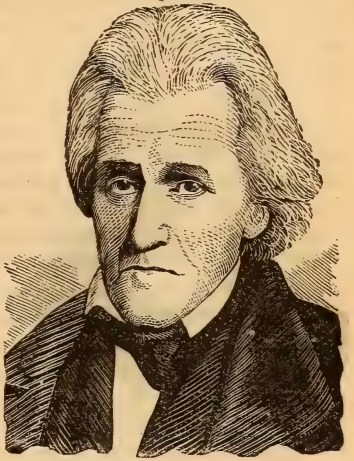
The Mixture of Two Temperaments:—

I. The Sanguine and Bilious Compound.—"This constitution," remarks our authority, "is distinguished by a head that is usually less than the average in size, but of a more dense or compact appearance; by coarse, brown hair, which frequently passes into black; grayish-blue eyes, which, as the hair is darker, are of a darker blue; the skin, when not exposed to the light, is very fair, but under exposure acquires a tan color; the person is lean and very firm, or dense; and in proportion, size, or weight, this is the strongest and most muscular constitution known to our species. The forehead recedes a little, and becomes more narrow as it rises above the

temples; the nose is not usually large, but of the Grecian form, unless the bilious element greatly predominates, and then it is long and slender—as with Otho the Great; or else it is large and Romaned—as with the Duke of Wellington and Gen. Jackson.

"When the bilious element is Xanthous, the brown hair will be replaced by sandy or yellow, and the black by red. In this class, the features are usually sharp; the lips are of medium thickness. As excellent illustrations of this constitution, I can cite Alfred the Great, of England. The late Alexander Hamilton, Major-General J. C. Fremont, Otho the Great, Wellington, and Gen. Jackson were of the more bilious variety of this constitution."

Fig. 179.



GEN. JACKSON.
Sanguine and Bilious Compound.

The annexed illustration gives so nearly a front view of the face, it might be imagined that the General had some of the qualities of the encephalic temperament, but his forehead, instead of running up squarely on each side, retreated in those directions, and with this understanding the portrait should be viewed. Dr. Powell, as will be observed by the reader, classifies him among those possessing the sanguine and bilious temperaments.

Fig. 180.

DANIEL DEFOE.
Sanguine and Lymphatic Compound.

II. Sanguine and Lymphatic Compound.—"This temperament or combination is distinguished usually by a comparatively low stature, broad shoulders, comparatively soft flesh, a broad and relatively short head, light hair, fair skin, and lightly grayish blue eyes. The forehead is broad, moderately elevated, without expansion at the top. The nose, usually, is neither large nor long—generally straight on the back—a little snubbed.

or recurved. The outline of the person is full and plump, and the back of the neck and base of the brain, broad. This temperament has a strong tendency to sensuality. A few of this class," continues Powell, "have meritoriously become distinguished; but many have, for their vices and crimes; and of these, the most distinguished was Nero. Daniel Defoe was neither good nor great, but 'Robinson Crusoe,' of which he was the author, is a good thing. The late Chief-Justice Story, of Massachusetts, ornamented this class."

Fig. 181.

BENJ. WEST,
Sanguine and Encephalic Compound.

III. The Sanguine and Encephalic Compound.—"This constitution is distinguished by light hair, fair skin, lightly grayish-blue eyes, person spare, and the flesh rather soft. People of this class are not remarkable for muscular strength or endurance. The forehead is more than usually vertical, and expands, as it rises above the temples. The nose is of moderate size, and usually straight on the back; but when the sanguine element predominates, the nose is larger, and considerably aquiline; when the encephalic predominates, it is slender, and more or less recurved, or of the celestial form. The lips are moderately thin. The only temperament with which this can be confounded is the sanguine; but such an error should never happen, because it could only be by carelessness, and in marriage it would be highly disastrous. In this constitution the muscular system is less developed, the forehead is more vertical, and is expanded down the temples, while in the sanguine it contracts. As illustrations of this temperament, I can cite the late Benjamin West, historical painter; the late Bishop White, of Philadelphia; the late Bishop Doane, of New Jersey, I believe; and the late General George Rogers Clarke, of the Western Military District."

IV. The Bilious and Lymphatic Compound.—"This constitution is distinguished by a full habit of the body, soft flesh, brown hair and eyes, a brownish or brunette complexion; the head is considerably globular, the cheeks rather ponderous; the nose is of average size—rather short and stubbed or recurved, but occasionally it has the pure bilious form—aqui-

line. As illustrations of this constitution, I may cite Mr. Barnum, of New York; General McDowell; General N. Greene, of Revolutionary distinction; General Paez, of South America; Judge Nelson, of Oregon; Ex-President Fillmore—of the xanthous variety."

Fig. 182.

P. T. BARNUM.
Bilious and Lymphatic Compound.

V. The Bilious and Encephalic Compound.—"This," remarks Dr. Powell, "is the constitution Hippocrates denominated the melancholic. It is distinguished by rather fine and brown hair, brown eyes, and a dark or brunette complexion. The person is spare or lean, and the flesh is moderately firm. The temples are usually depressed; the forehead usually recedes but little, but has invariably its superior third expanded. The nose is usually straight on the back, but frequently it is aquiline. When the bilious element is xanthous, the hair has some shade of red, and the complexion is florid. This constitution can only be confounded with the bilious, which it much resembles in person and complexion; but in the bilious, the forehead recedes much, and contracts above the temples as it rises; but in this it recedes less; but, above all, it expands as it rises above the temples. This temperament is considerably more masculine and enduring than its cousin, the sanguine-encephalic. As representatives of this constitution, I may cite Lord Bacon, in whom the bilious element was xanthous; Christopher Columbus; the late Dr. Samuel George Morton, of Pennsylvania; the late Professor John D. Gadman, of New York; and the late Professor Charles Caldwell, of Louisville, Ky." Dr. Powell classed himself under this head, and I give herewith a portrait of this gentleman, taken from his own work on the

Fig. 183.

DR. WILLIAM BYRD POWELL.
Bilious and Encephalic Compound.

temperaments. This illustration will be more satisfactory to the reader, than one taken from any one of the other gentlemen named as representing the bilious and encephalic compound, as it will be pleasing to the interested reader to see the face of one who gave so much attention to this branch of physiological science.

The Mixture of Three Temperaments :—

I. The Sanguine, Bilious, and Lymphatic Compound.—"This compound is distinguished by a full habit of the body, tolerably firm flesh, coarse brown hair, darkly grayish-blue eyes, head generally large; the altitude of the person is frequently six feet. The complexion of the hair, eyes, and skin in this, is precisely that of the sanguine-bilious temperament, and it is because the only difference between them is that this has lymph, and that has none; and lymph has no influence on the complexion—it may obtain as copiously in a black skin as in a white one; and further, this temperament is always founded on the sanguine-bilious. It is, therefore, but a modification of the sanguine-bilious, but regarded as a temperament."

"The capacity of this class of people," says Dr. P., "for muscular power and action is truly wonderful, when we contemplate the large quantity of lymph they carry. The most powerful men in our species obtain with this class; a very large majority of the champions of the English prize-ring have been of this constitution; the truth of this statement is verified by the English Boxiana. The refinements of civilization do not originate in this class. It has not even the luxury of a handsome woman; but some of its women are fine-looking, and so are many of its men. For the weightier achievements of civilization, this class furnishes its full quota of help. Representatives of this class are to be found in every situation between the great indicator of civilization, the gallows, and the thrones of empires. The forehead in this temperament, like the sanguine-bilious, recedes but little; is broad at the temples, but narrow at its superior third. As representatives of this constitution I can cite Peter the Great, of Russia; George IV., of England; Sir Charles James

Fig. 184.

J. MINOR BOTTS.

Sanguine, Bilious, and Lymphatic Compound.

Fox; the late S. A. Douglas; Jenny Lind; Queen Anne, of England; the late reverend gentleman who was executed in New Jersey for the murder of his wife; the late Stephen Girard, of Philadelphia; J. Minor Botts, of Virginia; General Putnam, of Revolutionary distinction; General Shields; the late General Nelson, of Kentucky; Dr. Laray, the military surgeon of the first Napoleon; Lord Byron; and J. C. Heenan, the American champion."

Fig. 185.

RUBENS, THE PAINTER.

Sanguine, Bilious, and Encephalic Compound.

II. THE SANGUINE, BILIOUS, AND ENCEPHALIC COMPOUND.—"This constitution is distinguished by precisely the same complexion of the hair, eyes, and skin, that distinguishes the preceding temperament. That part of the head behind the ears, and especially the lower part of it, is not so large, but the front-head, and the upper portion thereof, is larger. The person is slender, but muscular if given to exercise, but not strong; the features are sharp; the nose is less than the average size, usually straight on the back, but occasionally it is sharply aquiline; the lips are thin and flexible; the chin pointed. In this constitution the circulatory and respiratory functions are not vigorously manifested. This constitution is particularly liable to nervous congestion of the brain. In this temperament the temples are depressed, and the forehead expands as it rises above the temples. The only temperament with which this can be confounded is the sanguine-bilious, and in person, features, and complexion, they greatly resemble. But in this the forehead is superiorly expanded, and in that it is superiorly contracted; or in other words, in the sanguine, bilious, and encephalic compound, the forehead enlarges above

Fig. 186.

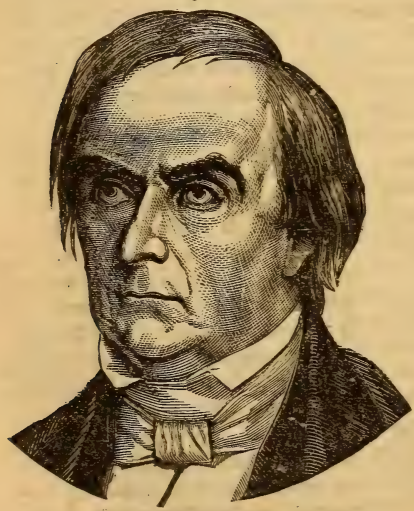
SIR WALTER SCOTT.

Sanguine, Encephalic, and Lymphatic Compound.

the temples; whereas, in the sanguine and bilious, it contracts above the temples, without again enlarging. As illustrations of the temperament I may cite Canova, the sculptor; Vandyke, the painter; Rubens, the painter; Lord Macaulay; Lieutenant Ingraham; and the late General Lyon. This temperament," remarks Dr. Powell, "is sometimes a result of incompatible marriage, and dies of consumption."

III. The Sanguine, Encephalic, and Lymphatic Compound.—"This temperament, like the sanguine and sanguine-lymphatic temperaments, is distinguished by light hair, fair skin, and lightly grayish-blue eyes; the bodily habit is full and soft; the stature of the person is frequently more than six feet. This class ornaments the species; it is truly elegant, highly adapted to literature, and, of all the temperaments, this most ornaments the pulpit; but it is not generally adapted to the rugged pursuits of life, nor even to the development of science. The only temperament with which this can be confounded is the sanguine-lymphatic; but in this the forehead is three stories high, and the third is as capacious as the first; in that, the forehead is but two stories high, and the first is the more capacious. In this, the upper third of the forehead is expanded; in that, it is contracted. The mistaking one for the other would not produce a constitutional incompatibility, but it would be an unpleasant mistake, because this is superior to that with reference to children. As illustrations of this temperament, I can cite Dr. Franklin; the Hon. L. Cass; Rev. Theodore Clapp; Addison, of the *Spectator;* Judge Blackstone, author of the 'Commentaries:' Sir Walter Scott."

Fig. 187.



DANIEL WEBSTER.
Bilious, Encephalic, and Lymphatic Compound.

IV. The Bilious, Encephalic, and Lymphatic Compound.—"This," ejaculates Dr. Powell, "is a magnificent variety of our species. It is not so ornamental and chaste as the preceding, but more capable of great achievements; it produces a

more energetic or masculine character; and of the brunette attractions of masculinity, those of this temperament are the most splendid. This temperament is distinguished by brown hair and eyes, and a dark complexion; a full habit of the body, with a tall stature generally. The forehead is tall, large and expanded in the upper part, and this feature distinguishes this temperament from the bilious-lymphatic. The nose is of average size, occasionally aquiline, but most frequently straight on the back; I have seen it a little recurved, and also a little pugged. This temperament is frequently distinguished by a high order of genius. As illustrations of this constitution, I may cite Nicholas, late Emperor of Russia, who in his time was probably the finest-looking man in Europe; the late Hon. Daniel Webster; the late Prince Albert; Prof. Agassiz; Dr. J. F. Gall; Gen. Garland; Gen. Curtis; Alexander I. of Russia."

The Mixture of Four Temperaments:—

I. The Sanguine, Bilious, Encephalic, and Lymphatic Compound.—"This class," remarks Powell, "has a head in size and form considerably resembling that of the highly encephalic, except that the cerebellum, or back head, in the combination is large, and in the purely encephalic, is small. In the combination, too, the head is more developed about the ears. The head in this combination has, furthermore, more the appearance of compactness and more symmetry of form, than those of the two preceding classes marked III. and IV. The two preceding have foreheads as tall and broad, but not so deep, though more expanded in the upper story. The posterior lobes of the cerebrum, or front head, are not so broad, but are more elongated in this class than in the two preceding. The complexion of this class is very various, sometimes quite dark. The hair is usually brown, but it may be yellow; the eyes are usually of a dark bluish gray, as in the sanguine, encephalic, and bilious combination. These two classes correspond very closely in complexion, but no further. This has a fuller habit of body; a less irregular head and body; is of higher stimulus; and has more vital force. The complexion may pass from dark to florid, depending upon the sanguine and bilious elements; the latter consisting of two varieties, the dark and xanthous. There are," remarks Dr. Powell, "many very inferior men in this class, as in all others. Nevertheless, for great achievements, we regard this as the most promising that can obtain in the race." One of the most marked representatives of this combination of four temperaments is the first Napoleon, whose picture is presented on the following page.

In all cases where this combination is evenly balanced, it must of course possess twenty-five per cent. of each temperament. It is, therefore, half vital and half non-vital. This being the case, a person having this combina-

tion would do best to marry one who is a pure representative of some one of the temperaments.

"The first Napoleon, and his wife, Josephine," remarks Dr. Powell, "were to ordinary observers very unlike; he had a full habit of the body, and his constitution was compounded of all the temperaments; hence he was half vital, and half non-vital. The person of his wife was spare, or lean, and her constitution was bilious and encephalic—consequently, half vital and half non-vital; hence she and the emperor were practically the same, and sterility was the result." "The second wife of the first Napoleon," remarks the same writer, "was sanguine, bilious, and encephalic, and by having no lymph in her constitution, there was an appreciable difference between her constitution and that of the emperor; and this difference brought them a son, but the difference was not sufficient to secure him from a scrofulous constitution, nor a scrofulous death before adult age." While a nice combination of the temperaments favors the physical and mental completeness of any man or woman, it also renders them liable to mistakes in marriage, in consequence of which, it is a proverbial fact, that comparatively few of our great men or great women have children that are viable or smart. Dr. Powell cites, as further personal illustrations of the sanguine, bilious, encephalic, and lymphatic combination, Caius Julius Cæsar, and Mr. Whitney, of New York, of Pacific and Atlantic Railroad notoriety, and also Alexander the Great.

Fig. 188.

NAPOLEON THE FIRST.

The above represents the four combinations of temperament: the Sanguine, the Bilious, the Encephalic, and Lymphatic.

The non-professional reader, after giving the foregoing compound temperaments a cursory perusal, may come out at the end as confused as a man, who, lost in the woods, emerges therefrom with his imaginary points of compass all askew in their aspects to the sun. He may throw down the book with disgust—exclaim, "Pshaw! Who in the world can ever obtain practical knowledge of the temperaments?" But sit down a minute; scratch your head a little; rub your brow; or, get up and stretch your arms and shoulders, and then quietly sit down again, and make up your mind to *study* this thing. It must be remembered that to be a good reader of the temperaments, they must be thoroughly studied, and not simply perused once or

twice. Nor yet will study alone suffice; the descriptions well impressed upon the mind must be daily applied to the world full of moving beings about you. By these means only can one become proficient in deciding fine points in a question of compatibility of those having the temperaments much mixed or compounded; and it is for this reason that the means I shall recommend for guarding the front door of marriage, should be instituted by the advocates of the monogamic system of marriage at once. No time can safely be lost. It is to be hoped that the science of temperaments may be taught in the schools, in the place of some of the "namby-pamby" accomplishments, in order that young men and women may be able to judge for themselves what unions are fit to be made; but, until an era of more general knowledge upon these matters is reached, it seems necessary to adopt other means, which, at first glance, may appear tyrannical.

The importance of temperamental adaptation is argued by Dr. Powell, by the presentation of facts coming under his observation of whole families of children dying in infancy, or before reaching adult age, in consequence of the incompatible mating of the parents,—in some instances, of ten or a dozen. Since acquainting myself with his classification and descriptions of temperaments, and making application of them, so many marked cases have come under my observation, corroborative of his theories, and the entire probability of his alleged facts, that it really seems surprising that medical men had not been awakened earlier to the importance of the temperaments, and the laws appertaining thereto in marriage and reproduction. In my publications, some eleven or twelve years ago, I gave some general rules in regard to this matter, which, I trust, have done some good, and by following them there was no great liability to mistake; but, with the advanced information furnished by Dr. Powell, it would seem as if there should be *no* mistake in any instance whatever. In the absence of general knowledge, the family physician should be a guide to the young people of the family he professionally visits and advises. If he tells you that the temperaments are all nonsense, ascribe it to a want of intuition, in perceiving and applying the principles of the science. A man may make a good surgeon who has not a perceptive brain, but no man should be attending the sick and administering to them medicines who is not perceptive and intuitive. You may easily pick out perceptive men. The forehead just over the eyes is prominent or projecting, giving to the front head generally a receding appearance. A man with a large front brain, without this conformation, may, however, if he have the patience to do so, study the temperaments, and learn how to apply the knowledge he obtains. But he must have patience. At the outset, such men are likely to denounce the whole thing as a humbug.

Not a single instance of sweeping infantile mortality in any family to which my attention has been called, has been difficult of explanation under

the rules of temperamental adaptation as presented by Powell. Nay, more —a thorough acquaintance with them will give to any clear-headed person seeming prophetic power in predicting not only the longevity of the offspring in any given case of marriage, but, in many instances, the diseases to which the offspring will be liable. For instance, if the encephalic temperament predominates in each, there will be a liability to brain difficulties, especially dropsy of the brain; in cases where the lymphatic temperament predominates in each, there will be a tendency to dropsy of the abdomen, or affections of the bowels, or glandular difficulties; when the vital temperaments predominate in each, the progeny will be susceptible to inflammatory, feverish, nervous, and spasmodic affections.

Many people who come together in perfect health, are surprised that they cannot have children; or if the children be fat and sleek-looking, that they cannot manage to raise any of them; or, if they manage to nurse them along beyond the years of minority, that they die at an early adult age. It is common, too, to mistake vitality for *vital tenacity*. A child or an adult may be strong, full of rich red blood, and possessed of all outward indications of health, and yet the first breath of disease sweeps them away. Why? Because, although they possessed *vitality*, they were deficient in *vital tenacity*. The first consists in those constitutional qualities which give a person a robust appearance, and the latter is that quality which renders one enduring. A person may possess both *vitality* and *vital tenacity*, or he may be deficient of *vitality* and live to a ripe age, notwithstanding occasional or frequent attacks of disease. Without *vital tenacity*, a person with every outward indication of vigor, or one deficient of this indication, will be easily carried off by an epidemic or the slightest attack of disease. A horse is stronger than a man,—gives indications of a greater degree of vigor and *vitality;* but, after all, he lacks *vital tenacity*, for the average age of this animal is not more than one-fourth the average age of man. But it is not necessary to leave the human family for illustrations of this proposition. Every reader who has lived on this mundane sphere a score of years, can, with a little exercise of the organ of memory, recollect persons of full vigor and *vitality* having died at an apparently youthful age, while other persons, whom their mothers and great-grandmothers supposed were in a dying condition for seventy-five years, still remain to creep up the steps of the village church every Sunday morning. Here, then, is the difference between *vitality* and *vital tenacity* strikingly exemplified.

Dr. Powell's observations for a quarter of a century, as related in his writings, led him irresistibly to the conclusion that *vital tenacity* in offspring is dependent upon proper physical or temperamental adaptation in the parents; while vitality, according to my own observations, is dependent mainly upon the physical condition of the parents at the moment of conception.

Vitality may even appear in the children of those who are badly mated in temperament, provided the parents were in good health at the moment the two germs united; but without the adaptation we are speaking of, the children will not be viable or long-lived. On the other hand, sickly parents who are well mated in temperament may have offspring gifted with longevity; if much out of health at the time of conception, the children will, however, in most cases go through life with impaired health. Instances have come under the author's observation, wherein short-lived parents, when united according to the laws of physical adaptation, have had viable children, who gave promise of living much beyond the age of their progenitors; but long-lived ancestry, combined with temperamental adaptation, better favors the longevity of offspring. Nevertheless, a sturdy ancestry fails to influence the longevity of its descendants if the laws of adaptation are disregarded in marriage.

Dr. Powell believed, after careful study and observation, that he had discovered a rule for determining the vital tenacity of an individual. "The animo-vital function," he claimed, "depended upon the cerebellum, or back brain, and the vegeto-vital upon the inferior and anterior portions of the middle lobes of the cerebrum, or front brain," and by certain measurements he felt confident he could predict with certainty whether or not a person possessed that *vital tenacity* which insured longevity. From my own observations for several years, I believe Dr. Powell to have been correct, and that he has left a rule of this kind, which it would be well for the profession to become familiar with by a perusal of his publications; but such is the morbid curiosity of people upon a question of this kind in its bearings upon themselves, I doubt the expediency of presenting it in a popular work, for not only would all sorts of mistakes ensue through want of ability to decide correctly so nice a point, but many would absolutely be frightened to death if they found on examination that they were deficient in what Powell denominated the "life-line." Persons having the indications of short life would be likely to die many years earlier than they otherwise would, by being made aware of the fact. For the physician, the knowledge of such a rule will the better enable him to judge as to which of his patients requires the most watchful attention, and to such he may give advice which will enable them to make the most of what *vital tenacity* they possess.

We will return to the subject of the temperaments, the importance of a knowledge of which is not only demonstrated by my own daily observations, but by those of other observing medical men with whom I am personally acquainted. Dr. Powell had a confirmation of his views in a reply made to him by a medical correspondent. "I have," says Dr. Powell, "estimated that five-sevenths of our marriages are more or less physiologically incompatible. This explains the rapid increase in our country of asylums for the care of

idiotic and imbecile children, and also of juvenile mortality. In the winter of 1860 the New York *Ledger* informed its readers that three hundred and seventy-four children more than were born, died in that city the preceding year. I wrote to a medical correspondent for the cause of this mortality. He responded: 'You know more about it than any one else, as physiologically incompatible marriage is the rule in this, and physiological marriage is the exception.'"

One of the difficulties encountered in monogamic marriage is to preserve compatibility. A man and woman may carefully study the temperaments, and may marry in obedience to the laws governing them, and yet, in less than ten years—in some cases in less than five—it will be found that the temperament of one or both may have so changed that their union not only yields no pleasure, but no enduring offspring. It will be seen in some cases that the first children of a marriage are viable, or enduring, while those born in after years die in infancy or childhood. How is this? Well, let us see. Mr. John Smith is a fair representative of the sanguine temperament. He is a spare man, with blue eyes, fair skin, and the outline appertaining to one of the temperament designated. He marries Miss Dorothy Jones, who presents in her person a good specimen of the lymphatic and sanguine compound. She is what is commonly called fat. This mating is very good to start with; but it may be spoiled by time and circumstance. How? Mr. Smith may adopt a sedentary life, live luxuriously, and thereby develop the lymphatic temperament in his person. This will destroy the former compatibility; or, Mr. Smith may not change at all, but Mrs. Smith may encounter hardships in her new position which will eradicate her lymph, and bring her down to the figure and temperament of Mr. Smith. Here, then, compatibility is lost, and children born under either of these changed conditions will lack vital tenacity. Again, Mr. John Brown may be a tall, thin, flat-chested representative of the bilious temperament. He marries Miss Semanthia Bigsbey, who is a rotund lady—"fat and jolly," as the people would say, and lymphatic, as the physiologists would call her. Mr. Brown enters a counting-room, where he is obliged to do much brain work, and carry upon his shoulders a great amount of responsibility. Pretty soon his forehead, especially if he be a young man, will begin to change from that indicating one of the bilious to one indicating the presence of the encephalic temperament. The non-vital temperaments now predominate in each person, and incompatibility is the inevitable result. Mr. Wilkins may have the sanguine, bilious, and lymphatic compound, and his estimable lady may be of the sanguine and bilious compound. He is one-third or more lymphatic, and she is purely vital, and the union is consequently compatible. But Mr. W. sees hard times; he is harassed; loses his money and good clothes; gets into a business tread-mill, which ex-

hausts all his lymph. He may have had viable children during the early part of his married life, but now he feels that "luck is against him," and he murmuringly quotes the trite refrain, "It never rains but it pours;" for, besides all his business disasters, all his little new-born pets die, or give evident signs of early mortality. They are, at the very best, victims to all sorts of maladies; and, with sickness at home, and vexation in his business, Mr. Wilkins feels that life has few attractions. It is safer for one having the indications of a pure sanguine temperament to marry one having the dark eyes, brunette skin, and general physical make-up of a bilious temperament, with a little additional of one of the non-vital temperaments. But, supposing in the latter the non-vital element increases to fifty per cent., and in course of time the one with the sanguine temperament begins to grow lymphatic, and finally settles down upon a basis of fifty per cent. vital, and fifty per cent. non-vital. Here, again, temperamental compatibility has been outgrown, and there will be no offspring, or, if any are born, they will die young.

Considering, then, the liability of married people to outgrow compatibility by constitutional changes, they should guard against them, when congeniality primarily exists. If one is developing too much lymph, turn to active business or physical exercise that will keep it down; if one is developing too much of the encephalic temperament, turn to those out-of-door and physical occupations and animal indulgences that will build up the vital and diminish the non-vital elements of the constitution.

We have to speak of another class who are not so fortunate as to have formed compatible marriage in the first place. In some of these cases we shall see that they could not have children at all at first; but, after a while, a weakly specimen of humanity makes its appearance, flickers like a candle in a breeze, and finally, poor thing, goes out. Another comes along in a year or two which may show better signs of health and long life; this may, or may not live; but, in the course of a few years, we may be surprised to find this couple bearing healthy and viable offspring. How is this? Why the changes which have taken place in the constitutions of these parties have brought about temperamental compatibility. Good! How I wish this would often happen. The reason why it does not, is, that married people, by frequent contact with each other, are more liable to grow similar than diverse in their constitutions, and physical similarity, be it remembered, is just what we are opposing, because it leads to incompatibility, while physical diversity gives to the married pair compatibility.

Those incompatibly mated at the outset, would do better to live much of the time apart. If both possess one of the vital temperaments, one of the parties should try to develop one of the non-vital temperaments. If young, the husband may develop an encephalic element, by taking upon himself a

business or profession which will exercise and enlarge the front brain, and decrease the vital elements. Or, the one which may be reasonably supposed from circumstances of parentage to have a germ of the lymphatic temperament, by physical inaction, high living, and residing in an atmosphere which is humid or moist, may develop the lymphatic condition sufficiently to make the union compatible and fruitful. The remarks as to how the non-vital temperaments are induced, or engrafted upon the vital temperaments, immediately following the descriptions of the non-vital temperaments, will be useful to people of this class.

If both the parties to a marriage have a preponderance of the non-vital temperaments, diversity may best be obtained if the lymphatic exists on either side, by the one who is lymphatic resorting to physical avocations which will work off the lymph. If both are encephalic, the one who possesses this temperament to the least degree should resort to that active physical occupation, and that cultivation of the appetites and passions, which will develop vital and diminish non-vital characteristics.

Those who are not already married, may better start right at the outset. It is easier to maintain temperamental adaptation than to acquire it, and this, in some instances, is peculiarly difficult, as nearly all people who have been married for ten or twenty years can attest. Frequent physical contact, sleeping together, cohabiting, breathing the atmosphere of the same dwelling, eating at the same table, and often of the same kind and quality of food, etc., greatly tend to produce constitutional similarity; so much so, that it is not uncommon for the good neighbors to say that Mr. and Mrs. So-and-so look alike, when at the wedding of the two, no one present entertained such a thought.

Dr. Powell numbers the temperaments consecutively, and then gives the appended directions in selecting a compatible companion.

1. Sanguine.
2. Bilious.
3. Lymphatic.
4. Encephalic.
5. Sanguine-bilious.
6. Sanguine-lymphatic.
7. Sanguine-encephalic.
8. Bilious-lymphatic.
9. Bilious-encephalic.
10. Sanguine-bilious-lymphatic.
11. Sanguine-bilious-encephalic.
12. Sanguine-encephalo-lymphatic.
13. Bilious-encephalo-lymphatic.
14. Sanguine-encephalo-bilious-lymphatic.

"The temperaments 1, 2, and 5, are respectively compatible with all of the other temperaments, respectively. In all marriages contracted with a view to, or a hope of a soundly viable progeny, one of the parties must have the constitution of 1, 2, or 5, and the other party must as certainly have the constitution of some one of the remaining temperaments. That is, one party being 1, 2, or 5, the other must be 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, or 14."

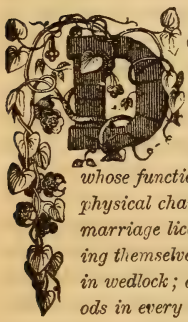
With the foregoing matter I shall close what I have to say upon the temperamental portion of what constitutes physical adaptation. If the reader cannot solve, by a careful examination of what has been said, for him or herself, some question which may arise of vital interest, correspondence may be opened with the author, or a personal interview obtained in relation thereto, by remitting or paying a fee of five dollars as compensation for time and labor in making the necessary examinations and explanations. Since the first issue of this book, about a dozen years ago, much gratuitous work of this kind has been cordially done, but the author's time has become so much of an item, that he cannot give attention to consultations of this character without remuneration equal to that which he would receive if devoting the same to the usual duties of his profession. In those portions of this essay quoted from Dr. Powell, I have somewhat changed the phraseology, in order to make the science of the temperaments as plain as possible. But there will doubtless be cases, in which there will exist such combinations of temperaments, that the reader contemplating marriage will prefer to have the advice of a physician who has given attention to this branch of physiology, before taking so important a step.

On opening this essay, I spoke of magnetic adaptation as forming a part of physical adaptation; and, in the next place, of temperamental adaptation, as necessary for physical adaptation. One more quality of fitness is necessary to perfect physical adaptation, and that is *local* adaptation. As I have presented this matter with illustrations in the chapter entitled, "Hints to the Childless" (see page 490), it is unnecessary for me to do more than suggest it in this place. I have no remedy. As observed in a paragraph among the "Historical Chips," on page 680, it used to be the practice to examine the procreative organs of candidates for matrimony before allowing them to enter; but a practice of this kind would be considered more useful than proper nowadays. Whether it might be possible and best to revive this old custom under a system such as that which I propose in the next chapter, I leave it to the good sense of the public to decide.

In conclusion, allow me to remind the reader of the importance of both mental and physical adaptation; not only because it promotes connubial felicity, but because it insures vital endurance, physical perfection, and mental balance, in those who are to take our places, when we drop the chrysalis and fly to our homes.

CHAPTER III.

LAW SHOULD ENFORCE ADAPTATION IN MONOGAMIC MARRIAGE.



OES the reader ask how? I reply, by doing away with the present rotten system of legalizing marriage, and substituting therefor a *Board of Physiologists well versed in the sciences of temperaments, physiognomy, and phrenology, composed of an equal number of males and females, whose functions shall consist in the power to examine into the mental and physical characteristics of candidates for matrimony—to grant or refuse marriage licenses according to the congenialities of the parties presenting themselves, and to grant divorces to those who are miserably mated in wedlock; a Board of this character, to have its sittings at stated periods in every county seat in the State, or the district to which it belongs.* Doubtless every reader will exclaim, "How queer!" but do not, I beg you, denounce the suggestion until you have given it reasonable investigation. What does the present system of legalizing monogamic marriage amount to? Does it guard the marriage state from cat-and-dog companionship, or sustain the respectability of the institution? Not at all. Men and women have only to show that they are of sufficient age to entitle them to enter the marriage relation, and forthwith they are ushered into matrimony, regardless of their qualifications to render each other happy.

In this State (New York) no licenses are granted; all that parties have to do is to present themselves before a priest, judge, mayor, magistrate, or alderman, and give notice in the presence of witnesses that they are about to assume the relation of husband and wife, and they are married. It is not even necessary to do so much as this; if it can be proven that two persons have lived together as husband and wife, the law regards it as marriage! But look at the divorce laws; it is almost impossible to dissolve the marriage contract, excepting for adultery, and one or two other aggravating causes! The marriage regulations of this State may be appropriately compared to the devil, who is said to lead men into perplexing scrapes, and then leave them to extricate themselves as best they can—or, like a rat-trap, always open to go in, but never open to go out.

In States where parties are required to obtain license before getting married, the system practically is no better. Candidates for matrimony have only to show that they are of age, and not married already, and license is granted on the payment of a nominal fee. I read, a few days ago, of a young girl in a neighboring State, who put the figure fourteen in her boots, so as to swear she was *over* that age, when application was made for license! In every State in the Union, men and women can rush into matrimony *ad libitum*, but when once caught, they can wriggle and twist like a pig in a fence, but cannot get out. The result is, that monogamic countries are filled with adulterers and illegalized polygamists, who sustain the health and soul destroying institution of prostitution: support in splendor thousands of fashionable courtesans; destroy the peace of the home circle; people our cities and villages with moral and physical lepers; fill our almshouses with paupers; our jails and prisons with criminals; our hospitals with cripples, and our asylums with lunatics. This is so, and every physician in extensive practice, and every intelligent man of wide observation, knows it. How vitally important is it, then, that monogamic marriage, which seals the parties contracting it to life-long happiness or discord, and perpetuates in health or moral and physical deformity, the noblest work of God, should be wisely guarded against mismated interlopers, who inveigle each other into the belief that they can make each other happy, when they are entirely destitute of the necessary qualifications to warrant the correctness of the impulsive supposition.

Without precaution in legalizing marriage, easy divorce will not answer. The present system of letting down the bars to every one who wishes to enter, and putting them up securely as soon as the victims are in, and the newly-proposed system of *keeping the bars* down for free ingress and egress, according to the changing impulses of mankind, are both lame and open to volumes of objections. I have briefly considered a few bearing against the former, and any one having half an eye can see those affecting the expediency of the latter. In the present state of public morals, libertinism would run rampant if men were permitted to rush in and out of marriage at pleasure. No, this will not do.

If the discoveries of science are of value to the student in pursuit of knowledge, and the business man in the pursuit of wealth, of how much more value may they become, if applied to men and women in pursuit of domestic happiness. It has been shown, in a previous chapter, that physical and mental adaptation are indispensable to a happy marriage, and it has also been indicated how adaptation may be obtained.

"Until phrenology was discovered," says Combe, "no index to mental qualities, that could be safely relied upon, was possessed, and each individual, in directing his conduct, was left to his own sagacity. But the natural law

never bended one iota to accommodate itself to that state of ignorance. Men suffered from unsuitable alliances (and women too); and they will continue to do so until they shall avail themselves of the means of judging afforded by phrenology, and act in accordance with its dictates."

In this country a great deal of scepticism and prejudice exists in the minds of the people in regard to the science of phrenology, and not altogether without reason; for we have no able champions and expounders of the science actively at work on this continent. The early efforts of Messrs. O. S. and L. N. Fowler were intelligent and well directed, but the latter has transferred his labors to England, and the former seems to have pretty nearly retired from active work. These deservedly popular gentlemen, if I am correctly informed, have no personal connection with the house bearing in part their name. Those who remain in the field have so allied themselves with the extremists of the hydropathic school, and with "Graham bread and tart fruit," that they have placed themselves in open antagonism to the learned men of the medical profession, and to the very ones whose pursuits and attainments best qualify them for comprehending the science, when presented free from irrelevant and questionable dogmas. The public is confronted by quacks in phrenology, just as it is in medicine. We have at the present writing in this country no journal of phrenology which is worthy the name. Our phrenological literature is weak and hydropathically watery. Phrenological examinations are too often conducted with an eye single to pecuniary profit to be correct. The examiner deals more in flattery than in fact; he makes a head, which in photograph would be mistaken for a turnip, the residence of a mind like Locke's, Bacon's, or Beecher's; he sets the unsophisticated subject on an intellectual pinnacle from which his weak head is made giddy to look down; he softens his head and heart with the oil of flattery till he finds easy access to the coveted recompense. If the people indeed were what the pseudo-phrenologist describes them to be, the American continent would be dimpled all over with the footprints of gods. Hence, the science is brought to ridicule in the house of its professed friends. We greatly need some great comprehensive minds, like those which originated the science, or like that of Combe, to awaken the American people to the value of phrenology. In brief, we want more of "*Combe* on the head." The elementary principles of phrenology might well be taught in our common schools. They may easily be acquired, and a knowledge of them would be of value, at least to all people of natural discernment.

On the other side of the Atlantic phrenology stands well with scientific men. "Among the members of the medical profession," substantially remarks Dr. Combe, "phrenology has many talented defenders and admirers.

Professor Elliotson declared that Gall has the immortal honor of having discovered particular parts of the brain to be the seat of different faculties, sentiments, and propensities. Mr. Abernethy saw no rational objection to Gall or Spurzheim's system of phrenology. Dr. Barlow, of the Bath United Hospital, had no hesitation to avow firm belief in it, and, he said, justly estimated, it had more power of contributing to the welfare and happiness of mankind than any other science with which he was acquainted. Dr. Mackintosh thought favorably of it. 'Although,' he remarks, 'I must confess that I have had neither time nor opportunity to examine the system of those distinguished anatomists and physiologists, Gall and Spurzheim, with that care and attention which the importance of the subject demands, and which might enable me to give a decided opinion respecting the truth of all its parts, yet experience and observation oblige me to state, that much of their doctrines appears to be true, and that science owes a great deal to the labors of the gentlemen who have been engaged in phrenological inquiry, Mr. Macnish believed the phrenological system the only one capable of affording a rational and easy explanation of the phenomena of mind. Andral, one of the highest medical authorities in Europe, was president of the Phrenological Society of Paris. Brussais expounded and defended the science in his lectures. The prejudice," continues Combe, "still existing against it results from ignorance of its real character. If, as has been well remarked, the truth and beauty of Gall and Spurzheim's philosophical opinions be admitted, one of two conclusions is inevitable. We must either grant the soundness of the organology from which those opinions sprung, or ascribe to the individuals who first taught them an amount of knowledge and talent which they would have blushed to hear attributed to them, and their possession of which is far more incredible than the entire body of phrenological science."

The real fact is, few people of intelligence who have given the subject much investigation doubt that different phases of character are indicated by the shape of the brain. Then, why should not the science of phrenology be made to subserve the interests of mankind; and how, I ask, can it be applied more advantageously than to the improvement of the present objectionable system of regulating marriage? Its friends urge that merchants may employ it successfully in determining the qualifications of clerks; and, if so, why may we not avail ourselves of it in the selection of conjugal companions for life? A clerk may be discharged any day, if he proves unsuitable for his place. The contract between his employer and himself can be easily dissolved. Not so the matrimonial contract. How invaluable, then, the science of phrenology may be made in regulating marriage.

It has been shown in the preceding chapter how physical adaptation may be attained in monogamic marriage, without resorting to that experimental system recommended by many reformers. The law of temperaments is the legitimate study of physiologists, who should, and may be able to tell, as soon as their eyes fall upon candidates for marriage, whether they are temperamentally adapted; and this adaptation being assured, mutual attraction, if not influenced by gold or family, would constitute a guaranty of magnetic adaptation. Then, as to local adaptation, by the co-operation of a Board composed equally of intelligent men and women, even this might be secured without indelicate exposure of person to examiners of the opposite sex. As observed in another place, there was a time when people were not allowed to marry without first submitting to an examination of their procreative organs (see page 680). It would almost seem as if a similar practice might, with propriety, be revived, under the improved plan of regulating marriage suggested in this chapter.

"Why not," interrupts the reader, "impart to the masses the knowledge of temperamental and mental adaptation, and let them decide for themselves who are probably suitable companions?" I certainly can offer no objection to this, but do not the masses need governing in this matter while they are destitute of such knowledge? Besides, a great many are too stupid to ever acquire it. There are persons in every State in the Union who cannot read and write, notwithstanding the educational advantages so universally enjoyed, especially in the New England and Middle States. Then, again, thousands of men, of unquestionable intelligence, are so completely engrossed in commercial and other business pursuits, that their attention cannot be diverted for one moment to the valuable teachings of physiology, phrenology, and physiognomy.

"But," says another objector, "it would be downright tyranny for a law to exist which would prevent a man and woman from marrying if they were of mature age, and had done nothing to debar them the privilege." Would it? What then can be said of a law which compels men and women to live together in a state of open warfare, because, in a thoughtless moment, they appeared before a minister, alderman, or magistrate, and united themselves in wedlock? The difficulty of dissolving the marriage contract, when once made, is well known to everybody who has given the subject any attention. Now, if it is anti-republican and unnatural to dictate in the choice of companions in monogamic marriage, so as to let only those unite who are physically and mentally capable of making each other happy, how much more tyrannical is it to compel men and women to live together who are only capable of rendering each other deplorably miserable? In Switzerland "the native of the cantons, obedient to the law of his country, seeks the *permission* of the magistrate when about to unite himself in marriage;

and his assent is only accorded when the parties are *fitted by nature, age, and circumstances.* The consequence of this wise legislation is a *hardy and mature race,* capable of every manly effort and endurance." This course is taken without any scientific knowledge of physiology and phrenology on the part of the magistrate, who is rather governed by cultivated perception than by any definite rule which should govern the union of the sexes. Still this imperfect system seems to be better than that which prevails in other monogamic countries, and brings into being a better race of men and women. Thus it is said of the Swiss that "they are an indomitable people, who have preserved their independence for five hundred years, surrounded by despotism." If the dictation of a wise magistrate works so well in the cantons of Switzerland, what great results might we not expect in the counties of the United States, if a board of physiologists were stationed in each, to grant or refuse marriage licenses according to the fitness of applicants?

"Let us have easy divorce laws!" exclaims one. That's right; but, sir, be consistent. Is a remedy better than a preventive? It is an old and truthful adage, that "an ounce of prevention is better than a pound of cure." Is this case an exception? It is plain that obedience to the laws of adaptation in marriage, will insure in a measure domestic harmony, and do away, to a considerable degree, with the necessity of divorce. Now, which should we do—maintain the integrity of the marriage institution, or open both the front and back doors, and let thoughtless people rush in and out—one day before the parson, the next before the judge?

Marriage is now considered a *lottery,* but it need not wholly be. The moral, mental, and physical characters of candidates for marriage may be completly unmasked to each other if the plan I suggest be adopted. All manner of deceit is practised by both sexes before marriage to entrap each other. If the woman be religious, then is her admirer a constant attendant at church; he bows his head with reverence in prayer-time; converses feelingly on the subject of religion, and obtains a reputation, at least, for morality, be he ever so depraved at heart. Does the woman possess a literary turn of mind—then does he temporarily devote his attention to literature, and pretends to be a laborious student. At the toilet he lays each particular hair where it will show to the best advantage. So does she. If his form is ugly, he bribes the tailor to conceal defects; has nature been stingy in developing her womanly charms, cotton and whalebone are called to the rescue. Many a man has married a supposed armful of female loveliness, which proved to be little more than he could have purchased at any fashionable dry-goods store; and many a woman has leaned her affectionate head against a shoulder too weak to support it.

Thus is every species of device resorted to in courtship to cover up moral, mental, and physical defects, which must all be uncovered in less than one

year after marriage. Do you say they get the worst of it as a just punishment for their deceit? No, they don't. The heaviest penalty falls upon the children of such marriages. "How many born of such relationship," says a writer, "are organically prepared for a fretful, joyless childhood, a nervous and uncomfortable maturity, and a stern and heartless old age? Have you never seen a young infant's eyes, that looked as old and sad as if they had been closed by grief?—faces that haunt you with their prematurely sad and earnest gaze? Yes, these effects of unnatural matrimonial relations look us in the face in every community." Nor is the offspring only involved in the wretchedness which follows. Society and religion suffer by such unwelcome contributions to the human race. Then, too, from the disappointed victims of unhappy marriage, prostitution receives its most liberal supporters; and, in fact, every moral department in life shares the penalty.

Were the plan I propose adopted, seldom would it be necessary for the Board to interpose an arbitrary edict. To begin with, men and women, girls and boys, knowing that their mental and physical peculiarities would be unreservedly disclosed by the officers possessing the exclusive power of granting licenses, would, to a great degree, dispense with artifice in conducting their courtships, and those who did not, would become heartily disgusted with each other's deception, when their characteristics were laid open for their deliberate consideration, by those who were approved judges.

The Board might be delegated with optional powers, and if parties applied who were tolerably congenial, explain discrepancies, and dismiss them to reconsider their proposed union. If a second application were made, it might be granted, but put a positive and irrevocable injunction on all who should be found, on examination, *totally disqualified, mentally and physically*, to render each other happy. This would be a signal death-blow to thousands of marriages which are now daily taking place for considerations of wealth, influence, and convenience. Especially should the firm foot, and the stiff upper-lip of every member of the Board come down, when temperamental incompatibility manifests itself to a great degree in the applicant for a marriage permit. When such marriages take place, the oft-repeated words of some pious old lady, that "God gives and God takes away," cannot console the short-sighted and grief-stricken mother, who, standing at the grave of one little one, carries in her womb another, and, still further, in her ovaries the promise of one, three, or half-a-dozen, all having to meet, even in germ life, that blight of incompatibility which is to give to the coming offspring disease and premature death!

Seldom are a man and woman so captivated with each other as to render prohibition fatal to the happiness of one or both, unless there is a certain degree of congeniality existing between them. Indeed, I doubt if such a case would occur once in a century.

Young people, full of moonshine, poetry, and romance, frequently form attachments which they fancy must be gratified, or their disappointed hopes will drive them to celibacy or the grave. To such of these as were found to have attachments based on the laws of adaptation, the Board could grant license, and the balance, I guarantee, would suffer no greater inconvenience than a few sleepless nights. There is a great deal of "puppy love" among this class, which can be easily transferred.

In a previous chapter I denounce the positive interference of parents in the matrimonal selections of their children. I do now, for the reason that such interferences are almost invariably prompted by personal prejudice, favoritism, or by other considerations of a selfish nature. Very few parents understand the laws of adaptation. Their opposition to, or persuasion in favor of, their children's alliances, is not in the least dictated by physiological and phrenological knowledge. A New York Fifth Avenue mother would no more allow her daughter to marry a farmer or a mechanic than she would permit her to become the wife of a Sing Sing convict! When the daughter of a wealthy man in New York recently married her father's coachman, all "snob-dom" was in commotion, and the poor fellow had to go to law to get the custody of his wife. Frequently farmers and others, who constitute the real bone and sinew of our country, are equally prejudiced against those they term "city fellows," and would put a summary veto on the marriage of a daughter to a "lying lawyer," or a slick-haired dry-goods clerk.

Thus is the marriage of men and women now made to conform to their social positions in life. Why not do away with all this, and make it only to conform to mental and physical adaptation? Let parents advise, but pass all dictatorial power over to a Board of scientific men, who can read character as readily as an intelligent man can read a newspaper, and who are also qualified, by their physiological researches, to decide with minute correctness on physical fitness. No marriage should be interdicted by parents, when mental and physical adaptation exists between their son or daughter and his or her selection. But this species of tyranny is daily practised under existing marriage regulations, and children are often virtually compelled to marry those for whom they have little respect and no love. It is absolutely ridiculous to charge the measures I wish to inaugurate with tyranny, when a worse species of despotism is now constantly practised by parents and society before marriage, and by the laws of every State in the Union, after the parties have been legally united. My plan would not be in the least prohibitive—only *regulative*. It would serve to put a stop to money marriages, which are now of daily occurrence, and which are a curse to the parties contracting them and to their posterity. It would prevent young men from marrying old women, and young women old men. It would prevent

young ladies from "marrying homes" and domestic misery. It would prevent "young people from marrying in haste and repenting at leisure." It would prevent rascals from becoming the husbands of virtuous women, and female fiends from becoming the wives of good men. It would prevent selfish mothers from selling their daughters to millionaires. It would prevent the intermarriage of relatives, and what is equally as objectionable, intermarriage between persons of like temperaments. But with real affectional marriages, founded on mental and physical attraction, it would not in the least interfere.

As a divorcing power, the organization of Boards of Examiners on the principle I suggest, would be the very perfection of human legislation. What do law courts know of physiology and phrenology? What qualifications do judges possess to enable them to decide on the merits of applicants for divorce? I do not question the value and correctness of their judgment in deciding titles to lands, the guilt of criminals, and so forth, but what has the judiciary legitimately to do with matrimonial quarrels, and deciding upon the physical and mental capacities of married people to render themselves happy in wedlock?

Legislators, too,—who are often appealed to by those who have contracted unhappy matrimonial alliances,—what are their qualifications, as a body, to judge of the expediency or inexpediency of decreeing a separation? An amusing specimen of their legislation in matters of divorce was recently given in the Ohio Legislature. An unhappy couple in Cincinnati petitioned that honorable body to unloose the fetters which had for *thirty years* bound them to an uncongenial companionship. For ten years they had lived under separate roofs. The petition was referred to the "Committee on Federal Relations," and the *same day* they submitted the following report, which, though calculated to disturb the gravity of the reader, cannot fail to impress every one with the unfairness with which they treated the application:—

"The petitioners, James and Maria Sutton, do not sufficiently set forth the cause why they 'mutually severed and parted;' and after a cohabitation of thirty years, it is necessarily very important to know these reasons. They leave an immense range of inference in the minds of this learned assembly. They might have been dissatisfied with each other's personal beauty, or wearied with their respective mutual attractions. They might have been fighting constantly for thirty years, and at last both being exhausted and neither being able to 'come up to time,' they mutually backed out, fizzled and crawled away from the scene of combat. Again, some direful fiend in mustache and patent-leather boots, may have intruded his fascinating but diabolical figure into their peaceful domestic circle, poisoned the happiness of that shrine, and finally caused a separation between the

blessed pair, and connection between his own back and a tough cowhide. Which of these is the cause, the committee are unable to say.

"Again, they are of opinion that two mortal sinners, who have been in purgatory for thirty years, should certainly be put through in one direction or the other, instead of being allowed to return to the terrestrial condition of their former existence. A precedent will be found for this course in the case of 'Orpheus *vs.* Pluto,' first Pandemonium Reports, 729.

"The committee could see no reason why these evidently ancient turtle-doves should not peaceably and quietly pursue the course they practised for thirty years, and mutually return to each other's bosoms; and would advise this course for reasons as follows:—

> 'For high the bliss that waits on wedded love,
> But purest emblem of the bliss above,
> Of one fond heart to be the slave and lord,
> Bless and be blessed, adore and be adored:
> To draw new rapture from another's joy;
> To share each pang and half its sting destroy;
> To own the link of soul, the chain of mind,
> That hearts to hearts, and hands to hands can bind,
> For ever and ever. Amen.'

"The committee being, therefore, unapprised of the causes of this separation or its probable monstrous results, can only recommend the House to advise them to 'stick it out' for their brief future of this earth. Whatever their difficulties or 'embarrassments' may be, whether sentimental or constitutional, the difficulties of the Legislature are both 'sentimental' and constitutional: as, therefore, this House 'wouldn't, if it could,' nor 'couldn't, if it would,' they recommend the petitioners to the Court of Common Pleas, and to beware of bigamy."

Courts of Common Pleas, and all other presently constituted legal tribunals, are not much more considerate in their treatment of divorce cases. In fact, the functions of these legal bodies, as evinced by daily observation, are rather calculated to keep people in hot water than to help them out.

A divorcing tribunal should be composed of men and women who make the sciences of physiology and phrenology their almost exclusive studies. A court of divorce thus organized would not be obliged to summon a crowd of witnesses to divulge all the private affairs of an unhappy married couple applying for relief, as do now the courts of law, where all the privacies of an unhappy marriage are eagerly exhumed for the world to gaze at, and scandalmongers to feast upon. It would rely only on the unerring evidences furnished by the mental and physical manifestations of the parties. It would not be necessary for this court to ascertain what horrible conduct one or both had been guilty of, but rather what violations of social and matrimonial relations might be

reasonably expected from the union of those uncongenial or antagonistic materials.

Men and women are generally good or bad, according to the circumstances which surround them. A woman may be a devoted and faithful wife if united to a congenial companion, who otherwise would bring disgrace upon herself by the most open violations of chastity. A man who has stumbled into an uncongenial marriage may become the frequenter of the bar-room and bawdy-house, who, had he been united to his true counterpart, would have been a model husband and an exemplary father. The world is full of good bad men and good bad women, who only need reassorting, matrimonially, to become happy fathers and mothers, and valuable members of society.

It has been said "there are ten times as many fugitives from matrimony as there are fugitives from slavery, and that it may well be doubted if the aggregate or average of their sufferings has been less." This was said when the institution of slavery was tolerated in this country. I will go further than the quotation, and assert that there have been ten times as many slaves in matrimony under the legal whip, as there ever were slaves in compulsory service under the overseers' lash! Escape from one has been about as difficult as escape from the other. While slavery existed in this country, "underground railroads" existed for sufferers belonging to the latter class, and a similar subterranean thoroughfare remains for those of the first class; but all escapes thereby are violations of law, and do not guarantee permanent liberty to the fugitives. But under present marriage regulations, we cannot be surprised that both husbands and wives do frequently avail themselves of it, and secretly seek that pleasure abroad which mental and physical uncongeniality denies them at home. "American society," says Dr. Davis, "is more critical and hypocritical than that of Paris. Hence, *without deserving* it, we get praised for virtue, and the French get cursed for vice." In France the "underground railroad" is tacitly tolerated; in Spain and Italy, openly so; in this country it is tolerated by neither word nor implication, but still has many passengers.

A Licensing and Divorcing Board need be attended with no expense to the State or county in which it is located. If the poorest classes of Mexicans can pay twenty-two dollars as a marriage fee to an exacting priest, cannot the enlightened and industrious men of our prosperous country pay five, ten, or even twenty-five for a marriage license, if so large a fee be necessary to maintain an efficient Board of Examiners? More than that amount is usually expended by the bridegroom in a wedding tour for wine and cigars, and, if not in this way, for some other superfluities.

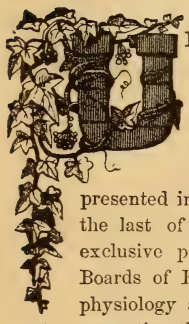
In order to sustain in purity the monogamic form of marriage, such laws for legalizing and divorcing matrimonial contracts as will tend to promote

mental and physical congeniality, must be enacted. If other institutions are permitted to spring up for the regulation of intercourse between the sexes, and allowed to flourish side by side with monogamic marriage, just such a Board as this chapter recommends is needed to take superintendence of them, to the end that peace and order may be maintained in all communities or families, however diverse in their domestic construction, that establish themselves within the limits of the State. Will not some State in our Union lead off in this reform? It cannot but succeed, if intelligently established, and its success in one State would insure its adoption in others, and in time we might look for the creation of that national bureau of marriage suggested in Part III.

Especially, should the advocates of monogamic marriage assist in this reform. Their pet system is daily growing into disrepute, and under the present *régime*, it cannot be long before it will become as rickety as it is to-day in France. Every good citizen should co-operate in a work of such magnitude and beneficence.

CHAPTER IV.

THREE PHASES OF MONOGAMIC MARRIAGE DAGUERREOTYPED.



UNDER the present hap-hazard system of legalizing marriage, and with the prevailing ignorance of the laws of physical and mental adaptation, it is not strange that the civilized world is full of ill-assorted matrimonial alliances. I shall attempt in this chapter to daguerreotype three of the most prominent phases of marriage presented in civilized society, all of which would be improved, and the last of which would be most effectually obliterated, if the exclusive power of granting marriage licenses were vested in Boards of Examiners fully qualified, by a proper understanding of physiology and phrenology, to decide upon the adaptedness of parties presenting themselves as candidates for matrimony.

1.—Mental Marriages.

Mental marriages may be defined as those in which social, moral, and intellectual adaptation has been secured, with little or no regard for physical adaptation. They may be termed nearly happy, as those which are perfectly happy have been formed under the auspices of both mental and physical adaptation. In all London, a newspaper statistician finds only one hundred and twenty-seven mental, or nearly happy marriages. In this country, where wealth and title have less influence with the people in their matrimonial selections, it is reasonable to presume, there is a larger percentage of mental marriages than in England. Still, in free and enlightened America, they are not numerous when compared with those of a more discordant nature.

Mental marriages may also be called friendship marriages, because the parties contracting them are drawn together chiefly by platonic love. Napoleon's marriage with Josephine was a mental marriage. Most people are familiar with the details of this, and it is therefore needless to repeat them here. Such an alliance engenders powerful attachments between the husband and wife, and imparts to each much social happiness. They enjoy

each other's presence, and are lonesome and morose when even temporarily separated. Still, if amativeness is largely or fully developed, entire contentment does not exist, because their want of physical adaptation disqualifies them for the full enjoyment of the sexual embrace.

Singular as it may appear, there are more elopements from this class than from any other. Unable to realize within themselves, to the fullest extent, that sexual gratification enjoyed by those of opposite temperaments, they frequently fall victims to seduction, and become the illicit companions of depraved men and women, whom they find, by bitter experience, are only able to impart to them transitory enjoyments, while the companionships of the intervals embraced in the ordinary social communications of life, are but wretched imitations of those previously enjoyed with the ones whom they cruelly and unreflectingly abandon. And not unfrequently the little enjoyment they do at first experience, in their new relation, is suddenly interrupted by the discovery that their new companions are not naturally possessed of any more power to make them amatorially happy than their lawful ones, and that the unusual felicity at first experienced with their paramours is wholly attributable to a slight difference in electrical conditions, and vanishes like a dream, when an equilibrium is restored between them.

Barrenness often occurs in mental marriages, in consequence of the similarity existing in the electrical conditions of the husband and wife, by which not only sexual enjoyment is curtailed, but also that activity and contractive power of the genital system necessary to reproduction. Then, if children are born, they lack endurance.

"It is a well-known law of nature," says Mrs. Hester Pendleton, "that issue follows the union of contrarieties. These contrarieties, it is found, must not only be male and female, but, in the human species, there should also be a *difference in the temperaments*. And hence it has been noticed by one who has given considerable attention to the subject, that those *wives who are of the same temperament as their husbands*, are either sterile, or if they have issue, their children are feeble, and generally short-lived. When, on the contrary, there is the most marked difference in the temperaments of the husband and wife, other things being equal, we usually find the most numerous and healthy offspring."

A French physician once informed me, that while practising in Paris, he was applied to by a gentleman and lady, both of the bilious temperament, and another couple, both of the sanguine temperament, whose marriages of many years had been fruitless. Both couples being painfully desirous of offspring, he resorted to various remedies to cure their sterility, but without avail. Finally, failing to receive any encouragement from medical treatment they mutually determined to try and remedy the difficulty them-

selves by a singular compromise, which granted to each disappointed husband the occasional custody of the other's wife. The lapse of a few months indicated that the novel experiment was successful, and at the expiration of the natural time both were presented with heirs! This instance answers better for an illustration of my position than for an example worthy of imitation by others. The expedient is more consistent with the French standard of morality than with that of ours; and yet, I am informed, that it is sometimes resorted to in the large cities of the United States.

Desire for offspring is, with few exceptions, common to all married people, as well as a passion for sexual enjoyment, and hence it is natural that more or less discontentment should exist when the electrical or temperamental conditions of a husband and wife so nearly correspond as to deprive them of one or both. It is not, therefore, surprising that mental marriages, which insure to the parties contracting them an immense amount of social happiness, do not yield that unadulterated connubial felicity which is obtained by marriages based on physical as well as mental adaptation. There are very few of the latter; perhaps one in a thousand. There would be more if the system of granting marriage licenses which I propose were established.

2.—Physical Marriages.

These are composed of males and females well mated physically, with little or no mental adaptation. They may be termed tolerably happy marriages. It is estimated that there are three thousand one hundred and seventy-five thus united in London. The average is larger in this country, for the reason before explained, that social equality is not enjoyed to so great a degree in the European as in the American States.

In physical marriage, many obtain all the happiness which they imagine matrimony can yield. Sexual intercourse is generally enjoyed to the fullest degree, by one or both parties, according to the equality, size, and activity of their amative organ, and the state of their corporeal health. In these marriages, husbands seldom find social attractions at home, but spend their evenings in business, in political caucuses, masculine gatherings of various kinds, or at the gaming-table or club-room. They are sometimes seen riding or walking, with closed lips, in company with their wives; and they have been known to hold conversation with them in public. But usually all evidence of conjugal affection, as well as all positive evidence of discontent, manifests itself only in the privacy of the bed-chamber. They are seldom seen together in social gatherings, public entertainments, or at any time; and if they are, a kind of mutual indifference is discernible to a penetrating observer. Still, without important interruptions, they sail down life's troubled stream with considerable smoothness, and in the society of friends, at least, profess

attachment to each other, which, in part, exists, while the world regards them as good citizens and happy people. The libertine is not as apt to bear off a prize from this class as from the first considered, though his attentions are not unfrequently encouraged, and his licentious propensities gratified. The unfaithful wife finds in his embrace an agreeable variety, resulting from the difference existing between his individual electricity and that of her lawful partner, to whom she has become accustomed. The husband, unless possessed of a consistent religious character, or great veneration for civil law, does not regard infidelity on his part as a crying sin, and still could not tolerate it in his companion. Elopements are very rare, because it is necessary that one or the other should experience, with a third party, sexual enjoyment never experienced before, to sufficiently prepare him or her for the sacrifice of early associations, friends, and reputation, at the altar of lust. It requires sexual intoxication to drive people to such an extremity, and nothing can produce this madness except a conviction that a husband or wife is incapable of gratifying his or her amative desire, while it has been found by experience that another can. Consequently, separations seldom take place in physical marriages, except by divorce, which are not uncommon, as infidelity on the part of either is liable to detection, and, on the part of the wife, unendurable!

Physical marriages are prolific, except when disease or sexual excess has weakened or destroyed the tone of the reproductive organs. The children of such unions are usually physically strong, but are apt to be unbalanced and distempered in mind.

Marriages of this kind, it would not be expedient to legally interdict, but the good counsel of an intelligent Board of Examiners might influence many intelligent persons presenting themselves for license, to seek more congenial alliances. The ladies, particularly, who think so much of attentive husbands, if convinced that their lovers are mentally so uncongenial as to probably become negligent after marriage, would be decidedly inclined to back out of all foolish engagements, when advised by a competent Board of Examiners. When there is, in almost every community, a true "Jack" for every "Gill," it is a great misfortune that there should exist so many ill-assorted marriages, by which husbands are rendered negligent and wives lonely and miserable.

Dr. Ryan probably had his eye on marriages of this class when he penned the following: "Every imperfection, capricious temper, vanity, folly, etc., appear in the married state. The demeanor toward the world is agreeable and obliging, but in domestic life the mask is thrown off, and an individual appears such as he or she really is. Hence, it is incredible how much a wife has to bear from a husband who is capricious, haughty, choleric, dyspeptic, and intractable; or what a sensible husband has to endure from a

silly, unreasonable, and intractable wife. "*It is difficult for married persons to acquire each other's tastes, feelings, and opinions.*"

This last remark contains a volume of truth. The writer might have said it is *impossible* for a husband and wife to *acquire* each other's tastes, etc. The only sure way to realize a correspondence in this respect, is to marry with due reference to mental adaptation; by so doing, similarity in sentiments is *natural*, and the impracticable task of *acquiring* is done away with.

3.—Lucifer Matches.

These may be defined, marriages contracted without regard to physical or mental adaptation. The civilized world is full of such. "The motives which influence a majority of the world in contracting matrimonial unions," says Dr. Ryan, "are generally false, selfish, and most detrimental to the procreation of sound and vigorous offspring; such as ambition, wealth, rank, title, interest, a love of independence, of an establishment, a desire to escape parental restraint, anger, a determination to disinherit relations, disdain for a faithless lover or mistress, necessity, obligation, passion, imitation, and very rarely the only proper motive, pure and virtuous affection."

In this division we find old men with young wives, and old women with young husbands. I have now in my mind's eye a man of thirty-five, who has a wife of fifty-five or sixty. They quarreled desperately for several years, under one roof, but finally the young husband left her bed and board, and the two have since kept up the warfare in courts of law. They alone have not suffered the penalty of their discordant union, but friends on both sides have been involved in the legal quarrels which have resulted therefrom. The health and once honorable character of the husband has been ruined; his wealth absorbed by lawyers and judges; and the reputation of many of his friends compromised by his subsequent open licentiousness.

Women who "marry homes" sometimes stumble into mental or physical adaptation, but not often. I have in mind several who have not married *peaceful* homes. "Family jars" are of almost daily occurrence, and disease marks the countenances of the unhappy wives. Their physician knows their wretchedness, but the world little dreams of it.

Those who are influenced by wealth in forming their matrimonial alliances are seldom so fortunate as to get congenial companions. Men will sometimes marry those for whom they cherish not one spark of affection, in order to secure wealth. Mr. L. N. Fowler gives a rich illustration of this class, as follows: "Mr. M., of O., married a lady from the city, and carried her to his home. He thought her father rich, and probably was sanguine in his hopes and anticipations. When they had been married some time, it was rumored that his father-in-law had met with losses which

would involve his property. So he took his 'cara sposa' back to her father's mansion. She had not been there long before her father's affairs turned out more prosperously than was anticipated. Then the good husband retraced his steps to the city, to take his wife back again; but it was *no go.* The father said nay."

Women often marry rich gentlemen for whom they hardly feel respect, thinking that a luxurious home and a fat purse will compensate them for all the misery they will have to encounter in eating and sleeping with an odious husband. They find experience a dear teacher, and, in this case, one from whose tuition it is difficult to escape.

Gold kidnaps many fashionable ladies, and subjects them to slavery the most abject. The visions of pretty dresses which flit through their minds, when a wealthy man proposes, perfectly bewilder their usually keen perception, and they seldom recover from their infatuation until the cruel trap is sprung, and they are prisoners in uncongenial matrimony. A majority of these wives would readily exchange situations with the prostitute, but for the loss of reputation which such a step would incur, for they are constantly obliged to submit to the embraces of a man whom they hate, while the trafficker in lust sometimes enjoys the embrace of one she can love. Women can entertain no greater delusion than that wealth alone can make them happy in matrimony.

The trade of acquiring wealth makes many men stingy, and it is not uncommon for the wives of wealthy men to carry light purses. It is particularly galling to the female who has been seduced into an uncongenial marriage by the attractions of riches, to find her husband parsimonious as well as ugly. Still, such is often the experience of women who marry golden husbands. A sad instance of this kind is related by Mrs. Nichols. Here is the affecting story as she gives it:—

"A most gentle and noble creature was my friend, ten years since. I have seldom seen so great material and spiritual beauty as she possessed. Her presence seemed to hallow all places, so pure, so truthful, so charming her life. She was the daughter of a widow, who lived in poverty in a remote country town, and she was induced to accept a man as her husband who was wealthy and educated, and could give her an elegant home, and the society of a city. She was very young when she married, and she was at once separated from her mother and friends, for her husband was so miserly that he would have grudged twenty-five cents given to any one, friend or foe, forever. He took her to a fashionable home, but the griping poverty in which she lived there was known only to herself, and those who were so placed for observation that they could not but see. The husband was not unkind, not ignorant, not an unpleasant man to those about him, but pinching meanness was a habit with him that involved all his life. The

wife was in all things disappointed. She knew that her mother, whom she loved adoringly, was sewing for a living when she had no strength to sit up, but lay and sewed in bed; that she was alone, dying very slowly of consumption, without even the comfort of a letter from her daughter, because of the expense of postage, which this lady could not get money to pay, though she lived in a house worth thousands of dollars. If she had married with the hope of sustaining her mother, or having her with her, how bitter was the disappointment!

"The young wife bore her heavy burden in silence—oh! how many burdens are thus borne!—till her health failed. She bore three children in rapid succession, and with suffering that only a mother can know, and then commenced having miscarriages and abortions. She begged her husband to allow her to come to me and have the benefits of water cure. I was sure I could cure her if I had her away from her destroyer: but he was her legal owner, and for six years she died constantly. Six times she miscarried or aborted, and a sickening horror of her false relation of soul and body, a daily and hourly misery, and constant flooding, was her lot. Her peerless beauty faded, and her glorious life became nearly insanity at times; and again a resigned and almost torpid idiocy seemed to possess her.

"Every effort was made by her friends to induce the husband to place her under my care, but in vain. He asserted his ownership to her latest breath, and after twelve years of agony and resignation, a human soul was blotted out, and the lifeless clay, beautiful to the last, was alone left to him who never had a thought but that she was his property as much as his horses or his house. He would have punished any infidelity to the marriage bond as he would have punished the thief of his horses, or the incendiary who had burned his dwelling—and yet his presence had been a hateful horror to his wife. She had been his victim, by far worse used than his harlot would have been had he been so immoral as to keep one, but he was not. He was a rich, respectable, and moral murderer, who had probably no more idea of his true character than society had. He had only starved his wife in her sympathies, and made her the slave of his senses, while he lived in his business, his dollars, his dinners, and, what is called domestic life, receiving much sympathy that his beautiful wife was always sick and sad, and not pleasant company."

Marrying to please relatives rarely secures mental or physical adaptation. Parents do not realize how much misery they frequently bring upon their children by persuading them to marry those for whom they feel no attraction. Were the legal guardians of the young as well instructed in physiology and phrenology as they frequently are in many studies of a less useful nature, their interference in the matrimonial selections of young people would be more excusable. But their objections to one or preferences

for another are generally the result of selfish motives, without regard to fitness.

A lady of considerable personal beauty and good education once called on me, in Cincinnati, to consult me regarding her rapidly declining health. I found, on examination, that her nervous system was terribly deranged, and that there was every appearance of approaching insanity. I knew she must be laboring under constant mental excitement, and interrogated her as to the cause. She was the victim of an unhappy marriage, formed at the instigation of friends. From her story it was apparent that neither physical or mental adaptation had been realized, for she did not give birth to a child till she had been married nine years, and her husband's society to her was any thing but agreeable. She was rather religiously inclined, while her husband was a profane wretch. He would make her blood thrill with the most horrid imprecations, without the least provocation. Although a prosperous merchant in respectable standing, she was never allowed a dollar in money, and almost suffered for the want of comfortable clothing for herself and child. She would have left him had one of her relatives been in circumstances to have afforded her a home; for her health was too far gone for her to think of self-maintenance; and, rather than have them suffer the unhappiness they would have, had they known her matrimonial trials, she kept them profoundly ignorant of her miserable situation. I was the only one to whom she had ever confided her infelicity, and the tears gushed from her eyes like water from a fountain, while she related the sorrowful tale of her sufferings.

But her case is no more affecting than thousands which have come under my observation. Nor does my experience differ from that of any physician in large practice. The world is full of "Lucifer Matches," and the wretchedness they entail destroys health; hence, to the physician is revealed the infelicity in married life.

The poet Milton's first marriage, belonged to the Lucifer class, I should judge, from the following extracts from his life and writings:—

"In his thirty-fifth year, Milton married Mary, the daughter of Mr. Powell, a justice of the peace in Oxfordshire. After an absence of little more than a month, he brought his bride to town with him, and hoped, as Johnson observes, to enjoy the advantages of conjugal life; but spare diet, and hard study, and a house full of pupils, did not suit the young and gay daughter of a cavalier. She had been brought up in a very different society; so, after having lived for a month a philosophic life, after having been used at home to a great house, and much company and joviality, her friends, possibly at her own desire, made earnest suit to have her company for the remaining part of the summer, which was granted upon a promise of her return at Michaelmas. When Michaelmas came, the lady had no incli-

nation to quit the hospitality and delight of her father's mansion for the austerer habits and seclusion of the poet's study.

"Milton sent repeated letters to her, which were all unanswered; and a messenger who was dispatched to urge her return, was dismissed with contempt. He resolved immediately to repudiate her, on the ground of disobedience; and, to support the propriety and lawfulness of his conduct, he published 'The Doctrine and Discipline of Divorce.'"

There is one passage in this treatise in which Milton clearly points to himself, and to the presumed causes of his unhappiness. "The soberest and best governed men," he says, "are least practised in these affairs; and who knows not that the *bashful muteness of a virgin may oftentimes hide all the unloveliness and natural sloth which is really unfit for conversation?* Nor is there that freedom of access granted or presumed, as may suffice to a perfect discerning, until too late. When any indisposition is suspected, what more usual than the persuasions of friends, that acquaintance, as it increases, will mend all? And lastly, is it not strange that many who have spent their youth *chastely, are, in some things, not so quick-sighted, while they haste too eagerly to light the nuptial torch?* Nor is it, therefore, for a modest error, that a man should forfeit so great a happiness, and no charitable means to relieve him, since *they who have lived most loosely*, by reason of their bold accustomings, *prove most successful* in their matches, because their wild affections, unsettling at will, have been so *many divorces to teach them experience.* Whereas, the sober man, honoring the appearance of modesty, and hoping well of every social virtue under that veil, may easily chance to meet with a mind to all other due conversation inaccessible, and to the more estimable and superior purposes of matrimony useless—and almost lifeless; and what a solace, what a fit help such a consort would be through the whole life of a man, is less pain to conjecture than to have experience." He speaks, again, of a "mute and spiritless mate;" and again, "if he shall find *himself bound fast to an image of earth and phlegm*, with whom he looked to be the copartner of a sweet and gladsome society."

Observation corroborates the truth of Milton's remark, that "they who live most loosely, by reason of their bold accustomings, prove most successful in their matches." I have often remarked the mental and physical adaptation existing between gamblers and their wives, and other characters of more notoriety than good reputation. "One-eyed Thompson" and "Bill Poole" were represented as most devoted husbands and kind fathers. No husband ever penned a more affectionate and affecting epistle than that which Thompson wrote his wife just previous to his suicide.

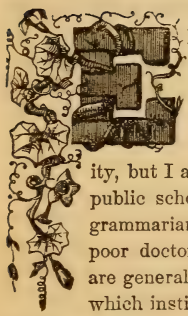
The tenacity with which the wives of bad men cling to their husbands when imprisoned for crime, is also an illustration of the correctness of Mil-

ton's remark. Many a wife of a respectable husband, in good standing in society, would consider it a most fortunate circumstance, if the latter were incarcerated in prison long enough to give her a chance to escape from the thraldom of uncongenial matrimony.

Milton advocated easy divorce. So do I. But I would have both the front and back gates of monogamic marriage under the care of competent men, whose physiological and phrenological acquirements qualify them to admit and release people with particular reference to mental and physical adaptation. By this wise arrangement all "Lucifer Matches" would be interdicted, and the happiness and longevity of the human family immeasurably increased.

CHAPTER V.

PHILOSOPHY OF ELOPEMENTS.



ELOPEMENTS are becoming so frequent, in both high and humble life, that Part IV. would be incomplete without an investigation into their causes. Over five hundred occurred in the United States during one year.

It is common to ascribe elopements to human depravity, but I am disposed to attribute them to human ignorance. Our public schools make good historians, good mathematicians, good grammarians, good geographers, good ministers, good lawyers, and poor doctors, but no physiologists or phrenologists; and parents are generally poorly qualified to impart that knowledge to children which institutions of learning so universally withhold. Hence, I claim that ignorance of the valuable sciences of physiology and phrenology, and consequent non-conformity to the law of physical and mental adaptation in marriage, is the chief cause of elopements. The law of adaptation in the marriage of men and women is the same as the law of affinity in the combination of substances. "By experiment," says Comstock, "we know that some bodies have an affinity to each other; that is, we know that on presenting them to each other under certain circumstances they will combine and form a third substance which differs from either of the first. We know also by the same means that other substances, when presented together in the same manner, will repel each other; that is, they will not combine, nor can they be made to unite so as to form a third substance. In a great variety of instances, after two substances have combined, when mixed alone, or without the admixture of any other substance, *this first union may be destroyed by the intervention of another, or a third substance, having a stronger attraction for one of these substances than they have for each other.*"

Now in this law of chemical attraction or affinity, we have an illustration of the law of mental and physical adaptation. By both observation and the teachings of science, we know that a male and female having adaptation or affinity, under certain circumstances, when presented to each other, will unite and form what is termed a married couple. We also know that there are males and females, who, when presented together, repel each other like

oil and water, but who may be induced to unite by adding a little gold dust, the same as oil and water can be made to unite by the addition of alkali. Again, we know that a male and female, tolerably adapted, may be made to unite, and that this first union may be destroyed by the intervention of another, or a third party, having a stronger mental and physical attraction for the husband or wife than they have for each other.

In chemistry, alcohol may be married to gum camphor, the combination being called spirits of camphor; but if water be brought in contact with this marriage, the alcohol will straightway elope with the water and leave the camphor a grass-widower. This same law is, to a great extent, obeyed by human beings, and elopements are usually first caused by the non-observance of the law of mental and physical adaptation in marriage, and secondly by the discovery, by one or the other, of a person for whom he or she feels a greater attraction. Let us suppose Mr. A. to be a man of the bilious temperament, with large acquisitiveness, small benevolence, small ideality, and small intellectual faculties. He marries Miss B., who is also of a bilious temperament, with small acquisitiveness, large ideality, large benevolence, and large intellectual faculties. Now, the similarity between their physical organizations disqualifies them to make each other happy sexually, while the dissimilarity in their mental characteristics destroys their social happiness. After a few years or months, Mr. C., a gentleman of the sanguine and lymphatic temperaments, full of ideality, benevolence, and intelligence, is introduced to the family. He finds Mrs. A. a most agreeable woman, and Mrs. A. is perfectly captivated with Mr. C. Now is it not apparent to every reader that it is perfectly *natural* for Mr. C. to run away with Mr. A.'s wife, and for Mr. A.'s wife to be entirely willing that Mr. C. should? Just exactly as natural as it is for the water to unite with the alcohol in the spirits of camphor, leaving the camphor to take care of itself.

But let us suppose a case in which mental adaptation has been observed. Mr. Smart, a gentleman of the sanguine temperament and full development of the social and intellectual faculties, marries Miss Prim, of corresponding temperament and mental characteristics. They are perfectly happy in their social relations, but not so in their sexual, because their correspondence in temperament renders their electrical conditions similar. Mrs. Smart feels nothing magnetic in the touch or presence of Mr. S., nor does Mr. Smart feel the least pleasurable emotion in contact with Mrs. S., further than that engendered by platonic love. They are as two negatives or two positives in their physical relations. In the course of time Mr. Villain becomes an acquaintance of Mr. S., and is introduced to the good wife. This Mr. V. is of the phlegmatic and bilious temperaments, with social and intellectual faculties corresponding with those of Mr. S. and his lady, which latter make him an agreeable friend. He may be entirely destitute of the moral and

religious organs, but Mr. and Mrs S. do not know that, for they have never investigated "that humbug" phrenology, and Mr. V. is not going to tell them he is a scamp. The new friend being of an entirely opposite temperament to Mrs. S, the electrical conditions of the two are totally unlike, and the latter experiences a strange happiness in his magnetic atmosphere. Anon, the community is perfectly thunderstruck to learn that the accomplished and amiable Mrs. S. has actually eloped with Mr. V., leaving her devoted and highly-respected husband disconsolate. Everybody marvels, but they would not, if the law of affinity in all its bearings, or the law of mental and physical adaptation, was understood.

"Professor Silliman mentions, that in June, 1823, he crossed the Hudson at Catskill, in company with a friend, and was proceeding in a carriage by the river, along the road, which is there very narrow, with the water on one side, and a steep bank, covered by bushes, on the other. His attention at that place was arrested by observing the number of small birds of different species, flying across the road and then back again, and turning and wheeling in manifold gyrations, and with much chirping, yet making no progress from the particular place over which they fluttered. His own and his friend's curiosity was much excited, but was soon satisfied by observing a black snake of considerable size, partly coiled and partly erect from the ground, with the appearance of great animation, his eyes brilliant, and his tongue rapidly brandishing. This reptile they perceived to be the cause and centre of the wild motions of the birds. The excitement, however, ceased as soon as the snake, alarmed by the approach of the carriage, retired into the bushes; *the birds did not escape, but alighting upon the neighboring branches, probably awaited the reappearance of their cruel tormentor and enemy.*" The snake was "charming" the birds, and this word "charming" is another expression for magnetizing. In a similar manner men charm or magnetize women of opposite temperaments, and run off with them. But my object in quoting the Professor's anecdote is to remind the reader how very similar is the conduct of some ladies to that of the birds in the story. They did not escape when they could. In a similar way, women often tamper with the electric powers of gentlemen, as if to see how far they can go without actually becoming their victims. In this way, women of religious principles sometimes astonish the church and society with elopements. When the libertine begins to exercise his magnetic powers to overcome their chastity, they do not think for a moment that there is a probabi ity of their yielding; but his atmosphere is agreeable, because magnetic, and so is his touch; consequently, they will, in a measure, encourage his advances. It is in this way that a married woman who wishes and intends to be true to her husband will sometimes tempt herself in the presence of a libertine, till all at once she is overpowered. A sense of remorse seizes upon her mind and is

aggravated in the society of her husband, because she knows she has deceived him; and, with this unpleasant reflection, his society becomes painful rather than agreeable. In such a state of feeling it is not difficult for her paramour to persuade her to elope. The birds alluded to should have flown off when the magnetic spell was broken, if they did not want to be swallowed by the reptile; and so with women. If they do not wish to succumb to the magnetic powers of the seducer, they should avoid his presence, and, above all, contact with him.

Women, too, often magnetize gentlemen of the opposite temperament, and make them do many foolish things—sometimes persuade them to run away from helpless families. Now all these evils, and those before adverted to, may be, in a great degree, avoided, if the law of mental and physical adaptation be observed in contracting marriage. Where perfect affinity or congeniality exists, no third party can be more affinitive or congenial.

It is nevertheless true that congenial marriages may sometimes be broken up by ignorance of the philosophy of sexual intercourse, as explained in another place. It is a common error with many husbands and wives to flatter each other that the animalism of marriage could not possibly be enjoyed with any other persons than themselves. This, so far from being true, is entirely the reverse. The almost constant contact in presence or person of a husband and wife does not allow either to fully regain their native electrical conditions, in consequence of which a person less congenially adapted physically, may actually possess a higher degree of electrical adaptation for either than exists between themselves. This, however, could only exist temporarily, if the two persons were allowed to come in frequent contact. But ignorance of this fact, sometimes willful and oftener otherwise, is the cause of elopements. A husband indulges in an illicit amour with a woman perhaps less physically adapted to himself than his wife; but never before having come in such immediate contact with her, the electrical conditions of the two are more dissimilar than those existing between himself and wife, who have perhaps eaten and slept together for years; the deluded man at once supposes his unlawful partner better capable of making him happy than his own wife, and an elopement is the result. A week or a month will suffice to bring about an electrical equilibrium, and the foolish fellow would gladly return home if his wife and society would but give him a cordial and forgiving reception. Wives, ignorant of this same philosophy, sometimes become unfaithful, and elopement is generally the result, unless they be so situated that infidelity cannot be detected by injured husbands. Under the last-named circumstances, the wife has an opportunity to learn the physical uncongeniality of her paramour before she takes the bolder step. Between persons of corresponding temperament, an equilibrium and a similarity in electrical conditions is soon

induced, and unhappy indeed must be the wife who abandons a more congenial husband for a less congenial paramour, while under the intoxication of sensuality resulting entirely from temporary dissimilarity in electrical conditions. It is high time that men and women understood the philosophy of sexual intercourse. Such knowledge would tend to make husbands and wives more faithful to each other, and greatly aid in the prevention of elopements.

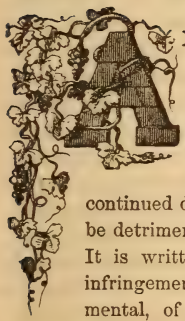
Negligence in dress and in preserving a good personal appearance, on the part of married people, is sometimes the cause of elopements. "It is no uncommon thing," says a writer, "for women to become *slatternly after marriage*. They say that they have other things to attend to, and dress is habitually neglected—except, perhaps, on great occasions, when there is a display of finery and bad taste abroad, to be followed by greater negligence at home. Great respect is shown to what is called 'company;' but, apart from this, there is a sort of *cui bono* abandonment, and the compliment which is paid to strangers, is withheld from those who have the best right to claim, and are most likely to appreciate it. This is a fatal, but too common error. When a woman, with reference to the question of personal adornment, begins to say to herself, 'It is only my husband,' she must prepare herself for consequences, which, perhaps, she may rue to the latest day of her life." In justice to the wife, it should be said that she does not always err in this way voluntarily. Her husband may be a stingy piece of meanness, who will not furnish his (literally) *better half* with the time and means to make herself beautiful, graceful, and gentle. So far as practicable, however, the wife should endeavor to make herself prepossessing to her husband as well as to outsiders.

Men, too, often become careless in their dress and manners after marriage They flatter themselves that their market is made, and that there is no further necessity for honeyed words, cleanly person, and good clothes. The trap of matrimony sprung, the two not unfrequently put on "old duds," and commence making grimaces at each other. Now, who is surprised to hear that one or the other, espying a more attractive person in another cage, or basking in "single blessedness," breaks out and runs off with the new object of his or her love?

Negligence after marriage is, however, generally the result of physical and mental unadaptedness, from which springs nearly all infidelity in the matrimonial state. Let wise legislation remedy this evil, and we may with certainty look for less connubial infelicity, and fewer love elopements from the ranks of the married.

CHAPTER VI.

INTERMARRIAGE OF RELATIVES.



ANOTHER natural law in regard to marriage is, says Combe, "that the parties should not be related to each other in blood. This law holds good in the transmission of all organized beings. Even vegetables are deteriorated if the same stock be repeatedly planted on the same ground. In the case of the lower animals, a continued disregard of this law is almost universally admitted to be detrimental, and human nature affords no exception to the rule. It is written in our organization, and the consequences of its infringement may be discovered in the degeneracy, physical and mental, of many nobles and royal families, who have long and systematically set it at defiance. Kings of Portugal and Spain, for instance, occasionally apply to the Pope for permission to marry nieces. The Pope grants the dispensation, and the marriage is celebrated with all the solemnities of religion. The blessing of Heaven is invoked on the union. The real power of his holiness, however, is put to the test. He is successful in delivering the king from the censures of the church, and his offspring from the civil consequences of illegitimacy; but the Creator yields not one jot or tittle of His law. The union is altogether unfruitful, or children miserably constituted in body and imbecile in mind are produced; and this is the form in which the Divine displeasure is announced." In Turkey, it is said of a simpleton, "He is of the Emirs." The Emirs constitute the hereditary nobility, and are the descendants of Fatimah, the daughter of Mohammed. They have intermarried so long and extensively, that their imbecility has become a by-word, even among those who revere the memory of the prophet.

In this country, intermarriage between relatives is practised to an extent which calls loudly for legislative interference. Authoritative statisticians have shown most plainly that a large percentage of the insanity and idiocy found in our asylums is attributable to this violation of nature's law,—and how many other diseases are produced thereby it is difficult to estimate. Speaking of the physical effects of intermarriage between blood-relatives,

the editor of the Fredericksburg *News* says, that, in the county in which he was raised, "for twenty generations back certain families of wealth and respectability have intermarried, until there cannot be found in three or four of them a sound man or woman! One has sore eyes; another, scrofula; a third is an idiot; a fourth, blind; a fifth, bandy-legged; a sixth, with a head about the size of a turnip; with not one of the number exempt from physical defects of some kind or other."

The reason why such marriages are injurious to offspring is plainly indicated in previous chapters, showing the necessity of physical adaptation. If two persons of the same temperament are nearly alike electrically, how much more so are two individuals of the same blood; particularly, if of the same temperament also. I have no doubt that, in all cases in which the children of full cousins entirely escape mental or physical disease, their parents happen to be of opposite temperaments. At least, my observation sustains this hypothesis. I have seen brothers and sisters so entirely unlike in temperament, as to be less nearly related to each other, physically, than to many persons not at all consanguineous. Such cases are rare, but it is nevertheless true they do sometimes occur. This condition oftener exists between cousins. But even when cousins do entirely differ in temperament, there is one weighty reason why they should not intermarry, viz.: *their inherited predispositions to disease are generally similar, in consequence of which the predisposed infirmity will almost assuredly be developed in the offspring.* When there is no such predisposition, and they are of opposite temperament, the objection to their intermarriage is not, perhaps, well founded.

Combe says that "in Scotland, the practice of full cousins marrying is not uncommon; and you will meet with examples of healthy families born of such unions, and from these an argument is maintained against the existence of the natural law which we are considering." "But," continues the same writer, "it is only when the parents have both had excellent constitutions that the children do not attract attention by their imperfections. The first alliance against the natural law brings down the tone of the organs and functions, say one degree; the second, two degrees; and the third, three; and perseverance in transgression ends in glaring imperfections, or in extinction of the race. This is undeniable, and it proves the reality of the law."

Has it ever occurred to the mind of the reader, that a man may as well marry a half-sister as a full cousin? It seems so on investigation. Indeed, the fact that the same relationship in blood exists, has been demonstrated by the Rev. J. H. Noyes, in a recent interesting article in *the circular*. A son has fifty per cent. of his father's blood and fifty per cent. of his mother's blood; but his brother or sister has one hundred per cent. of precisely the same blood that circulates in his own veins. When two brothers

marry and have children, each of the latter receive fifty per cent. of the family blood of their fathers, and therefore possess fifty per cent. of the same blood and fifty per cent. of diverse blood. Now, supposing a man has two wives, and children by each; is it not manifest that the children of each of these mothers have fifty per cent. of the father's blood and fifty per cent. of diverse blood? This fact seems self-evident, and being so, how, in point of consanguinity, do half-brothers and half-sisters differ in blood-relationship from full cousins? and yet it is denounced incestuous for a half-brother to sexually mate with a half-sister, and the world at this writing is in an uproar about a supposed case of this kind as recently revealed by a popular authoress. A great many believe that the charge is false, because the "crime" is so unnatural, and those who think the allegation may possibly be true, denounce the act as monstrous. Perhaps it would be well to expend some of this moral ammunition upon those who marry full cousins. Unless temperamental adaptation is remarkably perfect, it would at least be well for those contemplating such alliances, to reflect upon this suggestion. And even when temperamental adaptation is favorable, each of the parties thereto have fifty per cent. of the same blood or the same percentage that exists in common between a half-brother and a half-sister, and a marriage between the parties last mentioned would not be tolerated in any community in Christendom.

"It is thought," says Dr. Elliotson, "that a cross within the same nation is always desirable, but that a *cross between two nations begets* offspring superior to either. The importance of crossing an inferior nation with a better, is shown by the great improvement of the Persians, who were originally ugly and clumsy, *ill-made* and *rough-skinned*, by intermixing with the Georgians and Circassians, the two most beautiful nations in the world."

"There is hardly a man of rank in Persia," says Lawrence, "who is not born of a Georgian or Circassian mother; and even the king himself is commonly sprung, on the female side, from one or the other of these countries." Herein we see the beneficial effects of crossing temperaments.

The superior enterprise and native intelligence of the people of the United States is mainly attributable to the fact that our population has ever been heterogeneous, and made up of materials contributed by every nation on the globe. We have a mixture of all sorts—French, English, German, Scotch, Irish, Russian, Turk, Chinese, and every other variety which the old world can furnish, together with contributions from South and Central America. These have been, and are, constantly amalgamating or crossing. America, consequently, is, as she ought to be, the most powerful and progressive nation in the whole world. And still her prospects of future greatness would be immeasurably enhanced, if intermarriage between relatives and like temperaments were prohibited by law. Put a stop to

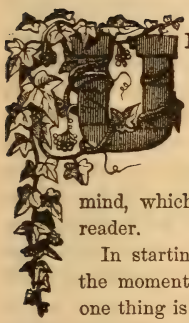
immigration, and allow consanguineous families and similar temperaments to intermarry, and national degeneracy would soon ensue.

Thus far, accidental crossing, arising from the presence and constant influx of foreigners, has given physical and mental vigor to our population; yet we have idiots, maniacs, cripples, consumptives, etc., who are, in a majority of instances, the production, directly or indirectly, of bad marriages. As a nation's greatness depends upon the character of her population, it is the duty of every government to bestow at least as much attention upon the improvement of her human stock, as agricultural societies expend upon the improvement of the breeds of their horses and cattle.

To have enterprising and intellectual men and women, we must have boys and girls who are well developed physically and mentally. To look for these without due regard to adaptation in marriage, is as foolish as to expect "the olive to grow on the craggy summit of Ben Nevis, or the pine-apple to expand amid the glaciers of Grinderwalde." Parents are in great degree responsible for the physical infirmities and mental imperfections of their children. They are particularly so, when the natural law against the intermarriage of relatives has been violated. Once put in operation a discriminative system of granting marriage licenses, such as I have suggested, and the marrying of nieces, cousins, and other blood relatives, will be discontinued, except in cases where temperamental difference and freedom from inherited diseases render the union unprejudicial.

CHAPTER VII.

ESSAYS FOR MARRIED PEOPLE.



UNDER this head, I desire to introduce a few essays of interest and use to those who have entered upon the duties and responsibilities of monogamic marriage. Having already presented a variety of matter of this character in preceding pages, little need to be added here. But there are some subjects occurring presently to my mind, which may be presented with possibly some profit to the reader.

In starting upon the new life which a man and woman enters at the moment they pledge themselves to mutual fidelity and love, no one thing is more necessary, than to start with, and maintain, entire confidence in each other, and to carefully watch and avoid every possible cause that may weaken or destroy it. It is poetically said that this man and this woman have become *one*, and however impossible this may be in a physical sense, it is not so in a moral or spiritual one. Nor can this *oneness* exist, unless the hearts and heads of both are opened to each other. No necromancer's game, of "Now you see it, and now you don't see it," can be safely played by the husband and wife. Every action, and every thought, should be frankly made known to each other. Many who have been for several years married, and now find that their hopes of happiness in matrimony have been irrevocably wrecked, will, with a little retrospective reflection on their conjugal voyage, find that the first snag they encountered, was an experience or a secret which they hoped to keep far enough below the surface, to prevent their family bark from striking it. Foundering by this cause, there is little hope of saving it.

If the husband have a thought, or perform an act, which he desires to conceal from his wife, that thought, or that action, is surely something he should, as he values his matrimonial happiness, confide to his wife. If the wife entertain a secret, or have an experience, which she "would not for the world tell her husband," that secret, or that experience is something which should be confided to the husband, if she would avoid a cause which commonly leads to disaster in matrimony. If, in any case, the confessor

places him or herself in a disagreeable attitude to the other, the more striking it is, so much more will its revelation strengthen the confidence of the latter in the integrity and intended fidelity of the former. On the other hand, every thing which is hidden or concealed by one, if never discovered by the other, is the entering wedge of confidence lost. For instance, if the husband allows himself to do something which he desires to keep secret from his wife, the very moment he presents himself in this attitude toward her, he begins to suspect his wife may have been guilty of something she is concealing from him. If the wife in any instance acts underhandedly, and keeps from the knowledge of her husband something which she should not conceal, from that very moment she is liable to suspect him of duplicity toward her. Why? Because it is a peculiarity of the human mind to suspect it possible in another to do that which you will do yourself. You may do more than this, and suspect another of that which you would not be guilty of; but you will never, in any instance, do less than believe one may possibly be bad enough to do that which you know that you can do, and have done, yourself. Is this not according to your individual experience, and of your observations of human nature the world over? You must reply, Yes. Then, it is readily seen that the deception of one in the marriage union causes a discord which threatens disaster to not only the guilty, but the innocent party.

When, however, deceptions are detected, in spite of attempted concealment, farewell to all hope of matrimonial concord and happiness. You might as well try to reconstruct a bursted bubble as to attempt to restore harmony and confidence here. And there is yet a worse condition, if possible. Those who have reached the point of mutual distrust, where the Bible is brought in, and the suspected party called to kneel upon it, or kiss the book, while affirming or denying in a matter in question, might as well divide and pack their dry-goods, and start, one in the direction of the rising and the other toward the setting sun, nor look at their watches, even in these days of steamboats and steam-cars, until the small-pointer-hand has had time to perform one entire revolution. You may as well think of rebuilding your burned cottage of the ashes which the wind and smoke have scattered over surrounding acres, as to set about the restoration of confidence between married people who have so often caught each other in deception that each considers the other—to speak in plain language—an unmitigated liar. When, therefore, deception which is not discovered leads to distrust and jealousy in the mind of the one who successfully practises it, and when the discovery of duplicity on the part of one or both inaugurates a fiery hell on the family hearth, it is plain that the only safe plan for the husband and wife to pursue is to have no secrets which are not mutual secrets; and to decide what is and what is not a secret, no better rule can

be pursued than this one: If it be something which you would just a little rather not tell the other, then it is a secret. If it is something which you would not have the other know on any account, then it is a tremendous secret, and should not be withheld for a moment. If those secrets belonging to the first class are invariably confided to the "partner of your joys and sorrows," you will hardly be likely to have occasion to entertain those belonging to the second class; but, if you do become the voluntary or involuntary possessor of any such, nothing will more surely strengthen the confidence of your companion than for you to make a "clean breast of it," and, if a wrong has been committed, lay yourself penitently at the feet of your injured companion. With this preliminary counsel as to the best way of starting out in married life, I will proceed to give some distinct essays, containing suggestions calculated to promote happiness on the matrimonial voyage.

The Wife the Equal Partner.

It is the custom of married men to hold the purse-strings, and to entertain the opinion that they have the right to do so. "Do not I," interrogates the egotistical individual in pantaloons, "do the work that earns the money, and is it not I that supply the family bread and the clothes for the wife and children?" I shall meet this interrogatory with a summary, and you may think, impertinent—*No, you don't!*

Simply because it is for your *interest* to put your wife in a less prominent position than you occupy yourself in your relations with the world about you, this fact, I say, does not establish your claim as the sole earner of the means whereby the material wants of your family are supplied. If you are poor, and she at home attends to the daily duties of preparing your food, washing your clothes, mending them, and keeping your home in the best order she is capable of,—is thus spending her hours for the mutual good and comfort of the family, while you are in the field or workshop, spending your hours in earning money,—every dollar of that money which flows to your pocket, equitably belongs—not to one of you—but to each of you. Fifty cents of each hundred you have an undoubted right to, but to no more; the other half properly belongs to her. If you are above indigency, and servants perform the manual duties of the household, while your wife only superintends the domestic machinery, and maintains the social status of your family, while you are at the shop or counting-room belaboring your brains for money—in equity, fifty per cent. that you earn is the undoubted property of your wife, for, as an offset to the time you have devoted to money-making, she has spent her time in making your home orderly and pleasant. You are an equal sharer with her in the products of domestic comfort, and she is equally interested with you in

the products of your industry. But here is a family that is rich; the husband boasts that he will not allow his wife to do a stroke of work; his pride would be touched if he entered his house and found his wife with a needle in her fingers or a broom in her hands. Is she entitled to one-half the products of his business, and the interest of the money which is loaned? Certainly; why not? Does she not sacrifice that contentment of mind which is incompatible with idleness? Does she not indulge him in every whim which he thinks will tend to aggrandize the family? Does not she entertain his guests at the table, and in the parlor, and is she not a helpmate in all which preserves the family in the social position he so greatly desires to maintain? Suppose he does spend a few hours every day in the counting-room, or at his office, does she not spend as many in devising ways and means to make the home such a one as he desires, and in having her hairs laid one upon another "precisely so" by the hair-dresser, in order that her husband may not be ashamed of her, and to the end that he may receive compliments to his taste in the selection of a wife?

Really, there is no position in social life where the wife's labors are not, valued by dollars and cents, worth just as much as those of the husband. And from whom is she to receive her compensation, if not from her husband? True, you supply the table, the clothing, the finery, etc.; but what man is there among you who would be willing to work simply for your board and clothing? The black men of the South were unwilling to, and the abolitionists of the North, espousing their cause, were unwilling that they should. Admitting that they were as good, are they any better than our wives? The mere fact that you receive the money which comes from your mutual labors or sacrifices—or from the properties which belong to the family, does not entitle you to exclusively hold it. Even the black women of the South, since the abolition of slavery, are not blind to this fact. Mrs. Gage informed us, in 1867, while laboring for their improvement, that these women did not want to marry, at least, not in the church, "because," they said, "if we are married in the church our husbands have the right to all our wages, and can do just what they please with us!" In every trading-place you will find persons who are called cashiers or treasurers. You will find them even in dry-goods and grocery stores. What would be thought of one of these chaps in the treasurer's box if he pocketed all the money passed over to him by the salesmen? And how do you think the merchant would look under his nose, above his chin, and between his whiskers, if, when he came to the cashier for ten dollars, the obstreperous individual should ask what he wanted to do with it—Wouldn't five dollars do?—Hadn't you better let me get it for you?—or, Can't you get along without it? Mr. Cashier, indeed, would not have time to ask half these questions,

before the boot of a spirited merchant would come in jarring contiguity with the "nap of his pantaloons."

Now, then, the husband, in every case, should be to his wife in a measure what a merchant expects of his cashier. He is simply the treasurer of the family, the custodian of the funds, not the sole earner or owner of them. He expends from the common fund a great deal of "pin-money" without giving any account to his wife what he does with it; and her privileges should be fully equal with his. If some objector says that women are spendthrifts, the same charge may be justly made against men; or, in other words, if you will examine into the characteristics of the men and women of any neighborhood you choose to select, you shall find as many spendthrifts among the men as among the women, and, according to my observation, a great many more. Nor could a better cure be devised, if it is homeopathic or based upon the principle that "like cures like," than for the money of the spendthrift husband to be accessible to the spendthrift wife, or *vice versa*. The grand result of their mutual prodigality would work out its own remedy in time.

The fact is, there is more danger to the finances of the family when the husband is a spendthrift than when the wife is one, and the same would be the case if the family purse were open to both parties. The income of the family generally enters his hands, as he is the treasurer, and he may be a defaulter to an immense sum without the knowledge of the wife. If the husband will in all cases make the wife a confidant in regard to the present and prospective finances of the family, there is little reason to fear that she will be a spendthrift, and it will be time enough when she proves herself one, for him to keep her fingers out of the family funds; nor should this arbitrary rule exist unless it may be reversed if the husband be the one against whom the charge of prodigality may be justly made. In monogamic marriage, to insure even tolerable happiness—privileges and disabilities should bear equally upon husband and wife.

The idea that so generally prevails, that the husband should be the sole master of all the products of the family industry or the family estates, while it causes much annoyance and often suffering to the wife during the continuance of a matrimonial contract, results in greater injustice to the wife in case of separation or divorce. In cases of this kind, often the merest pittance is set aside for alimony for the wife when the late husband is luxuriating in wealth. An instance illustrative of this occurs to the mind of the author at this moment, wherein the divorced wife of a man who is worth not less than two or three hundred thousand dollars, receives alimony to the extraordinary amount of seven dollars per week—considerably less than his coachman gets for his services! If the view I am endeavoring to impress upon the minds of the public could become general

as to the joint copartnership of husband and wife in the family revenues, such injustice could not emanate from the court-room, nor be tolerated by a Christian community. The least that can be justly set aside for the wife in case of separation or divorce, is an equal half of all that has been accumulated from the day of the marriage to the hour of its dissolution, unless there be children, in which case the share which in equity belongs to them, should first be deducted from the whole, and an equal division made of the remainder. Then the parent adjudged best qualified to bring up the children should be the trustee of their portion. In most cases this office would fall to the mother, and in nature ought to, unless there are reasons of sufficient weight to order otherwise.

Fig. 189.

THE APPLE,

Raised by the mutual industry of the pair, should be divided equally in case of separation or divorce.

When, however, a woman marries a rich husband, or a man marries a rich wife, it would be difficult to apply this rule in separation or divorce, because, if applied, it would encourage mercenary men, and women of like character, to contract marriage with the rich, with the primary intention of effecting a separation at as early a day as would be compatible with external decency. In cases of this kind, and in all those involving nice points, a Board of Physiologists for licensing marriage and *granting divorces*, such as I have recommended in the chapter commencing on page 830, would be just what would be wanted. A Board of this kind would be likely to prevent the marriages of men and women for any such motives, and when, by apparent mental and physical adaptation on the part of the applicants, they manage to accomplish their purpose, a body of this kind could determine with the greatest degree of probability as to how much their marriage was due to mercenary motives, and how much to natural attraction. In all cases wherein good reasons were presented to show that the parties were actuated by the right motives in contracting the marriage which they, one or both, seek to renounce, a

good share of the wealth of the one who brought money to the family should be set aside for the one who came in empty-handed; and in all cases where this is not done, a fair salary for the latter should be deducted from the money or estates of the wealthy party—a salary reckoned from the day of marriage to the hour of its dissolution. It rather spoils one, as everybody knows, for the practical duties of life, or at least for the labors one encounters in poverty, to spend many years in the luxurious ease common to affluence; hence, a man who has been taken out of his original element, and been pampered and spoiled by a rich wife, or a woman who has been raised, by marriage to a wealthy man, from an humble position to one that has turned her brain and unfitted her for the place she formerly occupied, should, in case of separation, be abundantly provided for from the family estates, unless it can be clearly proven that the motives of the one having the scantiest purse were simply to revel for a while in the luxuries of an extravagant home, and depart when tired, bearing off a share of the injured companion's fortune.

If public opinion could undergo reformation in the matter under consideration, our law courts would feel compelled to do better, but the organization of such a marrying and divorcing Board as I have suggested, would be just the measure that could successfully guard both the front and back doors of marriage, and dispense even justice to those who seek to sever an ugly or burdensome yoke.

Sleeping Apart.

Married people sustaining the monogamic relation, especially, make a great mistake in allowing themselves to sleep together. This practice leads in a measure to uncongeniality. From five to eight hours bodily contact in every twenty-four with one person not only causes an equalization of those magnetic elements which, when diverse in quantity and quality, produce physical attraction and passional love, but it promotes permanent uncongeniality by making the married pair grow alike physically. The interchange of individual electricities, and the absorption of each other's exhalations, lead directly to temperamental inadaptation, and to this cause may doubtless be ascribed one of the chief reasons why a husband and wife manifest such a tendency to grow alike after many years of matrimonial companionship.

The "Laws of Life," commenting on this subject, remarks, and, I think very truly, that "more quarrels arise between brothers, between sisters, between hired girls, between school-girls, between clerks in stores, between apprentices in mechanic shops, between hired men, between husbands and wives, owing to electrical changes through which their nervous systems go by lodging together night after night under the same bedclothes, than by any other disturbing cause. There is nothing that will so derange the nervous

system of a person who is eliminative in nervous force as to lie all night in bed with another person who is absorbent in nervous force. The absorber will go to sleep and rest all night, while the eliminator will be tumbling and tossing, restless and nervous, and wake up in the morning fretful, peevish, fault-finding, and discouraged. No two persons, no matter who they are, should habitually sleep together. One will thrive and the other will lose. This is the law; and in married life it is defied almost universally."

If the quotation be true, we find that the mischief is even greater than that presented in the first paragraph, or perhaps it may be said that, added to what I have suggested, the reasons why married people should sleep apart are peculiarly striking and important. In corroboration of what is stated in the quotation, I may say, that I have been informed hundreds of times by husbands who have consulted me, that they felt ever so much better when absent from home, or when by some incidental causes they slept apart from their wives, and quite as many married women have reported precisely the same results regarding their experience when rooming with or without their husbands. It is evidently far from being a whim, or it would not be entertained by so many people who have no social intercourse or acquaintance by which to originate it and report it uniformly. The statement comes from quarters too diverse, to allow the charge to be made that it is a morbid fancy and a local contagion, which originally sprang from the imagination of some nervous old lady.

A reform in this custom, however, can hardly be expected to be made in one generation. Husbands and wives who have been in the practice of sleeping together for five to thirty years, will hardly be persuaded to relinquish the social luxury of spending their nights together, especially if their matrimonial life has led to a fair amount of social enjoyment. The retiring chit-chat, and the morning helps of a little pinning or brushing, and aid in buttoning or hooking, are little affairs, but great in the aggregate, and not to be easily set aside. And even the habit of feeling a companion by one's side during the waking moments, or when turning over, is one which cannot be given up by some, without passing many restless or sleepless nights in getting used to it. For all persons, however, who are disposed to undertake a partial reform in this matter, the plain people of Germany have a practice which might be adopted as a sort of compromise. A newspaper writer speaks of it as follows: "The married people, of plain life, sleep in two single beds, each being a 'sweet little isle' of its own, while the two are affectionately contiguous. The connubial neighbors can respectfully shake hands, and wish good-night and good-morning. But the territory of each is distinct; the cloths are cut separate; each bed is complete, and there is no continuousness of bolster or implied community of pillow." The adoption of this custom would be a step in the right direction; but for the

improvement of the monogamic system of marriage, and to the end that physical adaptation attained at the outset may be preserved, it would be better for the young folk who are following in our footsteps, to avoid our mistakes, and that of sleeping together is clearly one of them.

In addition to the suggestions already offered, why married people may better sleep apart, there is a consideration of an æsthetic nature, which may with propriety be urged here. It is this: Young or unmarried people, when they meet each other in society, are more or less ornamented by their costume, and, too, their faces are washed, their teeth brushed, and their hair combed. Now, it is not a little dampening to the romantic element of a refined nature, to meet the companion you love in a nightcap and night-gown at night, and then to behold the whole night gear thoroughly mussed with the night's sleep, on arising in the morning. Then, again, nearly everybody snores a little—some a great deal—music which is not bewitching nor calculated to make one place a greater value upon his or her matrimonial partner. Where there is one "sleeping beauty," there are a hundred persons who in their slumbers look like facial contortionists. Throw a glance at the sleepers in stages and other public conveyances, if you don't want to look at home, and decide if what I say is not true. Nothing but the baby—"the blessed baby"—as a general rule, looks graceful in the arms of Morpheus. As for night-clothes, they are little less than hideous in some, and fantastic in the best of families. "Nature unadorned is," certainly, "adorned the most" when the clothing of the day is thrown off. To preserve the charm which takes root in the imagination and perfumes the fancy during courtship, these considerations, to make use of a euphonious expression, are not to be "sneezed at," although their importance bears no comparison to that of the suggestions contained in the first paragraph of this essay, and those given in the quotation from the "Laws of Life."

Sexual Moderation.

Both health and happiness in monogamic married life are seriously curtailed by sexual excess, growing out of ignorance of the philosophy of sexual intercourse. No man or woman should neglect to read the essay commencing on page 622, for a perusal of that cannot fail to impress the mind of the reader with the fact that sexual excess, besides exhausting the nervous system, and thereby rendering its victims susceptible to disease, produces in the monogamic relation sexual satiety. In no way, probably, can the physiologist apply a more certain remedy to this evil than to convince married people that moderation in indulgence heightens the pleasure, and that those who give way to excess lose much of the sexual enjoyment afforded in married life. With this view, I shall treat this subject more

with reference to the direct effects of sexual excess upon the pleasures than upon the health of the married.

Bearing on this point, I find some very truthful remarks in "Love and Parentage," by O. S. Fowler. "If," says the writer, "parents would diminish their frequency so as to enhance ecstasy, they would be incalculable gainers in the amount of pleasure experienced, besides doubling, perhaps quadrupling, all the endowments of their offspring. No mistake can be greater than the prevalent supposition that hymeneal pleasure is in proportion to frequency; whereas it is in the reverse ratio. Do we not enjoy a single meal, when really hungry, more than scores when not so? So here frequency begets satiety, and gluts the appetite and enjoyment. Suppose New Year came once a week, we should take less pleasure in fifty-two New Years than we now do in one, because frequency would render it insipid; whereas, now, weeks and months are spent in most delightful preparation and anticipation of this one day, which is often an instrument of more and more exalted pleasure, than any entire month of the year. The applicability of this illustration to the case in hand, is too apparent to require specification, and the practical lesson here taught should induce the married, merely as a means of securing the very pleasure sought, to partake less often, that it may be with a keener relish.

"Bear in mind that we write to PROMOTE sexual pleasure instead of to curtail it. We recommend abstinence in order to increase the sum total of enjoyment, and deprecate frequency, because destructive of the very pleasure sought. The epicurean philosophy is the true one. Self-denial forms no part of our creed. We go for SELF-*enjoyment* in the fullest sense of that term, and in its application to the subject in hand. We wish to show parents how they can the most effectually ENJOY this banquet, instead of diminishing one iota from hymeneal bliss as such. That exercise of this function is most concordant with nature which yields the most enjoyment, both in and of itself, and in its various and multifarious bearings on our other enjoyments. Thus qualified, neither our motives nor our philosophy can well be misunderstood; for we give the largest liberty compatible with the highest sexual enjoyment, to promote which is the one desire of both this section and this work. Call me not a hymeneal stoic, but EPICURE; yet as gluttony precludes gustatory pleasure, and as a single meal, eaten with the keen relish conferred by appetite, gives more and more exalted pleasure than scores without it, so hymeneal postponement is the secret of hymeneal appetite and pleasure; while, as the gourmand can never know exalted gustatory pleasure, so the cloyed advocates of connubial frequency necessarily deprive themselves of most of the pleasures they seek, and what few are left are embittered." Continues the same writer, sexual excess "breeds disgust for its paramour. We are compelled, by a law of mind, to regard a

frequent partner of sensuality as a kind of *animal tool*, a mere sexual *thing*, gross, low, and sensual. This shows *why* the libertine, however intently he pursued his 'game,' before indulgence, always becomes indifferent after desire is sated, and finally casts her off. This is *always* the case, because based in the law of mind that sensuality, in and of itself, degrades its joint partner in their own eyes, and in the eyes of each other breeds disgust of self and one another, deteriorates the moral tone, and demeans and animalizes the entire being. This abasement is *inherent* in excessive indulgence for its own sake; nor does marriage wipe away the polluting stain. Carnality is carnality, the world over, in wedlock as much as out of it, and *constitutionally* 'breeds contempt, disgust,' and hatred, even between the married. This must *always* be the case where animal indulgence is sought; the laws of nature knowing no difference between those *legally* married or unmarried. I speak of mere animal indulgence as such."

Many good things have been written by physiologists on this subject, but their arguments against sexual excess lack vitality, because neither themselves nor their readers correctly understand the true philosophy of sexual intercourse, and upon a proper understanding of this depends the reformation of married people.

As has been previously shown, sexual pleasure is produced by the action of electricity, in three forms, on the sensitive nerves permeating the sexual organs, viz.: individual electricity, chemical electricity, and frictional electricity. The first is the natural product of every animal organism; the second, of the union of acid and alkali; the third, of friction, which draws the electricity from the nervous systems of both the male and female while in the act of coition. Now, to render individual electricity active in copulation, sufficient time must elapse between each indulgence to allow the male and female to regain the electrical conditions peculiar to each. Sexual pleasure depends, in great measure, on the *electrical difference* existing between the parties, and the longer intercourse is abstained from, the more unlike will they become electrically, and consequently, greater will be the enjoyment if long intervals intervene between each copulation. That this philosophy is sustained by fact, every married couple know who have come together after long separations. The electrical conditions of two persons of the same temperament may become as much unlike by protracted separation, as those of two persons of opposite temperament who are continually together. Hence, married people of like temperament should be more abstemious than their neighbors, who are physically adapted, in order to derive the same amount of gratification.

To render chemical electricity active in copulation, sufficient time must elapse for the vagina to get clear of the neutralized fluid. As soda is insipid after the effervescent effect is over, so is the alkali of the vagina

dead and inactive after having been neutralized by the acid of the male. Several days, and sometimes weeks, must elapse, after one indulgence, before the secretions of the vagina will become so purely alkaline as to be prepared for another animated combination with the acid of the male.

The action of frictional electricity is about all that is left to exercise the nerves of the generative organs of the slaves to sexual excess. The enjoyment of this is not so much dependent upon moderation, because the nervous systems of all living persons are constantly supplied, more or less, with vital electricity, to carry on the various functions of life, such as digestion, muscular motion, etc., and this can be diverted to the sexual organs by violent friction. But all this is at the expense of the vital system, and brings sexual excess down on a par with that horrible practice—masturbation. Many married people open their eyes with holy horror, when they learn of the secret practices of careless youth, apparently unconscious that sexual excess is no better. But such is the fact.

"Who can say," interrogates Dr. Dixon, "that these excesses are not often followed by those direful diseases, insanity and consumption? The records of our madhouses, and the melancholy deaths by consumption, of the newly-married, bear ample witness to the truth of such assertion. Are they not transmitted to posterity? Look at the frequent mental imbecility, and the pallid hue, and attenuated form of the children who are the earlier products of marriage, and see the parents vibrating between life and the grave, until the candid physician, or the terrors of death, teach them to abstain, and nature gathers up her shattered powers, and asserts anew her control of the organism. Should the lesson suffice and mature age be attained, again look at the offspring; if the first children survive, the last would not seem to be born of the same parents, so different are they in vigor and sprightliness; and in maturer life, almost invariably more intellectual." We, therefore, see that the sexual happiness of married people, and the health of parent and child, depend upon moderation in the marriage-bed.

I have said, in one part of this volume, that excess on the part of the male is more ruinous than excess practised by the female. This statement is based on the supposition that the amative desire, or amative excitability, is equal, or in other words, one is as amative as the other. But when the female is apathetic sexually, with perhaps not only no desire, but rather an aversion to intercourse, then it injures her most, for the reason that that friction of the parts, without their excitement, induces irritation, and finally inflammation, and other uterine affections which ultimately destroy the life of the wife. There are men made up so strong in their animal organs, having excessively large cerebellums or back heads, that can endure a great amount of sexual indulgence; these persons, in some instances, kill

off a great many wives. Why? Because women are more æsthetic than men, and the beastliness of such a husband will in time kill out every desire; intercourse becomes disgusting to them; they dread the approach of their husbands. With this state of apathy and aversion on the part of the female, intercourse is mechanical, and the contusion of her organs by the organ of the male, is just about as injurious as if a billet of wood were introduced instead of the organ which nature provided. But all this excess on the part of men so powerfully made up in their animal organization, eventually cripples them. They may stand it for ten or twenty, or even thirty years, but when they become old men, you shall generally find them crippled by paralysis of body or imbecility of mind. When the amative passion is stronger on the part of the wife, and the husband is induced to indulge too frequently, his spermatic losses are so excessive, that he very soon breaks down, for his animal organization is not made up strongly enough to even presently endure the drain. I am often asked the question as to how frequently intercourse may be indulged in without injury. I am compelled to respond that no precise rule can be laid down in figures. There is one rule, however, which every one ought to observe, and which will answer for all persons better than any one proposing a certain number of times per month or per year. It is this: Do not have connection when there is any reason to suspect that you will feel a sense of exhaustion after it. Whenever it occurs, followed by a sense of great fatigue, you may depend upon it, that you have violated physiological law. Physical exercise may be indulged in to a point which brings only a sense of pleasant fatigue, so that it may feel agreeable to sit down; but when you carry the exercise to that excess that you realize a sense of exhaustion, and sit down or lie down with a feeling as if you could never get up, you may depend upon it you have injured yourself. So with intercourse; a slight sense of fatigue following it may not indicate excess; but a sense of utter exhaustion succeeding it always does.

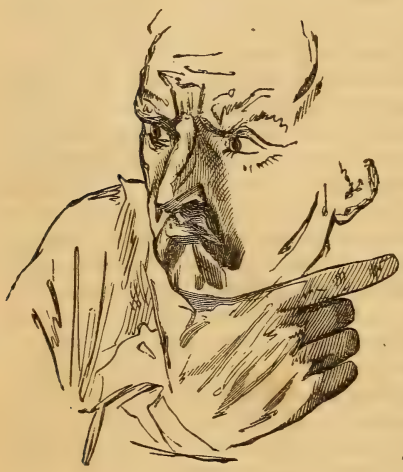
Jealousy.

This "green-eyed monster" is a common visitor at the hearth of the monogamic family, and is a great destroyer of its peace. As I have what I regard an infallible remedy for it, I desire to give the prescription to such as are willing to swallow a dose that will do them good, if taken without regard to its momentary bitterness.

To the husband: When you see that your wife takes a fancy to some gentleman, do not try to find out how many bad things people say of him, and report them to her; do not criticise what you regard as his personal defects and bad manners; nor is it best in any way to oppose her fancy by saying all sorts of disparaging words against the gentleman. From this

offensive course, which only deepens the sentiment entertained for him by your wife, turn to an amiable and conciliatory one, and invite the new object of her attraction to tea with you, and if it be possible to say any thing good of him, eulogize his many good qualities; indeed, in all respects treat him handsomely. This will make your wife admire your generosity and feel grateful to you. The gentleman, on the other hand, if he be at all honorable, will at once be placed where he cannot with any pleasure take advantage of your hospitality. Every moment of ecstasy will have its hours of remorse. Give the two an opportunity to socially exchange magnetisms, and there will be less temptation to clandestinely go further. This will make your wife amiable, strengthen her resolutions of chastity, and the gentleman, in most instances, will feel compelled to pursue an honorable course toward you. In brief, both wife and guest will feel under obligations of honor not to do any thing which will be distasteful to you.

Fig. 190.



JEALOUSY.

To the wife: When you hear from somebody that your husband is very attentive to some woman in the neighborhood, suppress all appearance of distrust or displeasure; ask him to invite her to call, and if he does not ask her, or if an invitation is unheeded, take pains to make her acquaintance by some means, if you are not already acquainted. Then drop in to see her; something may be conjured up as an excuse. You can make up an errand of some kind. Then follow up your attentions to her, whether they are returned or not. Ask her to tea. If she be a person much below you in social position, or one whom the tongue of scandal has openly assailed; or if, indeed, she be a courtesan, and your fashionable and respectable neighbors express surprise that you associate with her, quietly assure them that she is an intimate friend of your husband, and that he seems very much attached to her, and, further, that you keep her company on his account. This course of conduct will result in one of two ways: either he will be ashamed of the position in which he is placed, and abandon his attentions

to her; or if her position in society is respectable, and he chooses to continue them, he will feel grateful to you that you do so much for his pleasure. He will admire your magnanimity, regard you as a whole-souled woman, and could not, if he would, disengage his affections from you.

Well, supposing this course on either side leads to illicit intimacy, what then? I reply, it is difficult to see that the ultimate result can be any more disastrous to your matrimonial happiness than if the attraction was opposed. Open social association is certainly less likely to lead to illicit intercourse than clandestine meetings. The latter are liable to occur where much jealousy is exhibited. Even where illicit intimacy may have existed before the social intimacy was detected, unless it be your plan to separate and make the infidelity a cause of divorce, you may better pursue the same plan advised in the foregoing, for it will make the guilty party more confidential, and you will be able to judge with considerable certainty whether the intimacy continues. And if it be persisted in, the affections of the erring one will be less likely to be alienated from you than if the fancy be opposed, and you will continue to exercise more or less controlling influence over him or her. If opposition is made, oppose on grounds of morality, expediency, or respectability, rather than those of personality. Do not gather up all the vindictives your nature is capable of conceiving against the intruder, and hurl them at your companion. Such a course will lessen the love of the latter for you, and strengthen his or her affections for the former; the chasm between the married pair will constantly widen, and the erring companion will be found at last by the side of the abused and contumacious lover.

These are strange words, but they are true. Analyze the peculiarities of the human mind, and see if they are not theoretically correct. I am prepared, from much observation, to assure you that they are practically so, for there are families to-day living in tolerable, and to all external appearances, in perfect harmony, who were just on the point of matrimonial disruption, when, by adopting this recipe, the disaster was averted. It is common, when a person becomes jealous from either an imaginary or real cause, for him or her to become frantic and run around like a crazed boy who has exploded a fire-cracker in his eyes. The injured party is as blind as a bat and as uneasy as an eel on the hook of the fisherman. What is worse, he or she continually stumbles into the worst blunders instead of the best expedients in the painful emergency. My advice to all of you in this situation is to "simmer down;" take half an hour to eat a bowl of bread and milk, or a plate of ice-cream; pause for reflection after you have finished it; study human nature in all its phases, as presented to your observation and experience; then, instead of running your head against a stone wall, use its contents, if it have any, in devising means for preserving or recon-

quering the affections of the unfaithful spouse, and after trying all reasonable measures, besides what you may possibly regard as the unreasonable ones herein presented, if unsuccessful, your present remedy is in the courts, and it is to be hoped that your not far future one is in a "Board of Physiologists," as explained in the chapter before this. Thus relieved from the yoke which resulted in so much bitterness, it will not be difficult for you to fix your affections on another whose conduct may not arouse jealousy. If you are given constitutionally to this morbid feeling, it would be well, if a man, to marry a homely woman; if a woman, to marry an ugly-looking husband. You will usually be able to keep such a person wholly to yourself. A homely dog is never stolen. It is one of your fine "black-and-tans," or majestic "Newfoundlands," that gets enticed away from the family yard. But the rules I have prescribed at the outset to the husband and wife are certainly not more difficult than the golden one laid down in the New Testament, that "when your neighbor smites you on one cheek you shall turn to him the other."

Prevention of Conception.

Few words will be presented under this head, and even these would be omitted had not the author promised, in Part III., to explain what the Oneida Communists mean by "male continence." This course is by no means pursued because the subject is not one of the very utmost importance, but for two reasons, viz.: First, this work is growing too large; second, the author has already in pamphlet form a work treating fully upon this subject, which the reader may obtain by simply applying for it by letter or in person. Considering the incontrovertible facts that many people, in consequence of constitutional ill-health, inherited scrofula, family predisposition to insanity, indigency, or of too rapid child-bearing, should be provided with means for regulating or restraining procreation, it is surprising that anybody possessing a thimbleful of sense, who is not impotent, should question for a moment the propriety, nay, the necessity, of informing the people as to the best means science has yet devised for the purpose. This I have attempted to do in a pamphlet entitled, "Information for Married People," which will be mailed free in letter envelope, securely sealed from observation, to any one on receipt of the nominal sum of ten cents.

Now, for the physiological discovery of the Oneida Community, and the comments of the author thereon. The following are extracts of a letter to a medical inquirer, by the Rev. J. H. Noyes, the founder of Bible Communism:—

"We begin by *analyzing* the act of sexual intercourse. It is not such a simple affair that it cannot be taken in parts. It has a beginning, a middle, and an end. Its beginning and most elementary form is the simple *presence*

of the male organ in the female. Then usually follows a series of reciprocal *motions*. Finally, this exercise brings on a reflex nervous action or ejaculatory crisis which expels the seed. Now, we insist that this whole process, up to the very moment of emission, is *voluntary*, entirely under the control of the moral faculty, and *can be stopped at any point*. In other words the *presence* and the *motions* can be continued or stopped at will, and it is only the final *orgasm* that is automatic or uncontrollable.

"Suppose then, that a man, in lawful intercourse with woman, choosing for good reasons not to beget a child or to disable himself, should stop at the primary stage and content himself with simple *presence*, continued as long as agreeable? Would there be any harm? It cannot be injurious to refrain from furious excitement. Would there be no *good?* I appeal to the memory of every man who has had good sexual experience to say whether, on the whole, the sweetest and noblest period of intercourse with woman is not that *first* moment of simple presence and spiritual effusion, before the muscular exercise begins.

"But we may go farther. Suppose the man chooses for good reasons, as before, to enjoy not only the simple *presence*, but also the *reciprocal motion*, and yet to stop short of the final *crisis*. Again I ask, would there be any harm? Or would it do no good? I suppose physiologists might say, and I would acknowledge, that the excitement by motion *might* be carried so far, that a voluntary suppression of the commencing crisis would be injurious. But what if a man, knowing his own power and limits, should not even *approach* the crisis, and yet be able to enjoy the presence and the motion *ad libitum?* If you say that this is impossible, I answer that I *know* it is possible—nay, that it is easy.

"I will admit, however, that it may be impossible to some, while it is possible to others. Paul intimates that some cannot "contain." Men of certain temperaments and conditions are afflicted with involuntary emissions on very trivial excitement, and in their sleep. But I insist that these are exceptional, morbid cases that should be disciplined and improved; and that, in the normal condition, men are entirely competent to choose in sexual intercourse whether they will stop at any point in the voluntary stages of it, and so make it simply an act of communion, or go through to the involuntary stage, and make it an act of propagation.

"You have now our whole theory of 'male continence.' It consists in analyzing sexual intercourse, recognizing in it two distinct acts, the social and the propagative, which can be separated practically, and affirming that it is best, not only with reference to prudential considerations, but for immediate pleasure, that a man should content himself with the social act, except when he intends procreation.

* * * * * * * *

"1. It does not seek to prevent the congress of the sexes, but rather gives them more freedom, by removing danger of undesired consequences. 2. It does not seek to prevent the natural *effects* of the propagative act, but to prevent the propagative act itself, except when it is intended to be effectual. 3. Of course, it does not seek to destroy the living *results* of the propagative act, but provides that impregnation and child-bearing shall be voluntary, and, of course, desired.

"And now, to speak affirmatively, the exact thing that our theory does propose is, to take that same power of moral restraint and self-control which Paul, Malthus, the Shakers, and all considerate men use, in one way or another, to limit propagation, and, instead of applying it, as they do, to the prevention of the congress of the sexes, to introduce it at another stage of the proceedings, viz., *after* the sexes have come together in social effusion, and *before* they have reached the propagative acme; thus allowing them all, and more than all, the ordinary freedom of love (since the crisis always interrupts the romance), and at the same time avoiding undesired procreation, and all the other evils incident to male incontinence. This is our fourth way, and we think it the better way.

"The wholesale and ever-ready objection to this method is that it is *unnatural, and unauthorized by the example of other animals.* I may answer, in a wholesale way, that cooking, wearing clothes, living in houses, and almost every thing else done by civilized man, is unnatural in the same sense, and that a close adherence to the example of the brutes would require us to forego speech, and go on 'all fours!' But, on the other hand, if it is natural, in the best sense—as I believe it is—for rational beings to forsake the example of the brutes, and improve nature, by invention and discovery in all directions, then, truly, the argument turns the other way, and we shall have to confess that, until men and women find a way to elevate their sexual performances above those of the brutes, by introducing into them moral culture, they are living in *unnatural* degradation.

"But I will come closer to this objection," says Mr. Noyes. "The real meaning of it is, that male continence, as taught by us, is a difficult and injurious interruption of a natural act. But every instance of self-denial is an interruption of some natural act. The man who virtuously contents himself with a look at a beautiful woman, is conscious of such an interruption. The lover who stops at a kiss denies himself a natural progression. It is an easy, descending grade through all the approaches of sexual love, from the first touch of respectful friendship to the final complete amalgamation. Must there be no interruption of this natural slide? Brutes, animal or human, tolerate none. Shall their ideas of self-denial prevail? Nay, it is the glory of man to control himself, and the Kingdom of Heaven summons him to self-control in ALL THINGS. If it is noble and beautiful for the

betrothed lover to respect the law of marriage in the midst of the glories of courtship, it may be even more noble and beautiful for the wedded lover to respect the unwritten laws of health and propagation, in the midst of the ecstasies of sexual union. The same moral culture that ennobles the antecedents and approaches of marriage will, some time, surely, glorify the consummation."

Mr. Noyes closes his explanation of his mode of controlling propagation, with the remark that he supposes many objections and questions may arise in the inquirer's mind, for which he says he is already prepared with many answers. Mr. N. begins his reply to the inquirer with a general exposé and denunciation of all mechanical and other devices presented to the public for the same purpose, as injurious, etc., which I have omitted, for want of space, and because I cannot spare room to fully criticise each point. Admitting all that Mr. Noyes says of them, I must reply that they are necessary evils in monogamic marriage. With excellent opportunities for forming an opinion, I am prepared to assure Mr. N. that his plan is only satisfactory, or even healthful, where there is changing companionship, as in his Community, or where polygamy is the rule. In monogamic marriage, where one husband and one wife live and eat under the same roof, and have sexual connection exclusively with each other, as often as is usual for the married pair, or as often as might be advised by a physician competent to judge in any given cases presented, the individual electricities are too greatly equalized, to allow much pleasure in simply physical connection, and if the frictional electricity be added to any extent, the act will at that very moment be carried too far to leave off without injury to one or both parties, growing out of the suppression of the crisis. I know whereof I speak, because I have been acquainted with the discovery of the Rev. Mr. Noyes for several years—six or seven at least—and advised a trial of it in a very great number of cases, only part of whom were affected with the morbid condition of the sexual organs, which Mr. N. refers to; and the reports in all cases heard from were adverse to the physical effects of practising the "male continence" rule. While saying this, I do not doubt the plan works successfully in the Community. In the first place, men and women do not sleep together there, and then, as there is more or less variety in their sexual experiences, it is entirely possible that they may enjoy simply physical connection quite as much as married people, under the monogamic system, enjoy the crisis. There must always exist an agreeable diversity of individual electricities between congenial persons, male and female, who come together comparatively seldom, and who, in the interval, are more or less electrified by others equally unlike them in their electrical conditions. Sexual connection in this way may very possibly be carried on with the stimuli of individual

and chemical electricities alone (see page 623), without the frictional; and instead of the parties separating with a feeling of lassitude and disappointment, they may feel all the exuberance and magnetic glow that two lovers feel when bidding each other good-night after an evening's sitting, and a sense of greater satisfaction. All this is possible, I say, in Mr. Noyes family, of over two hundred congenial persons; but it is not in the monogamic family, and for this reason it is the duty of the physician to advise everybody who wants counsel on this subject, and prescribe means which will effectually prevent conception, and still allow the crisis to take place. The author has made the subject of regulating reproduction a study for nearly or quite fifteen years, and is willing to be laid open to the charge of egotism in saying that he believes he knows as much, if not more about it, than any other member of the profession. He has been called upon with reference to this subject by thousands, and is in possession of the individual experiences of them all. While willing to advise in regard to *prevention of conception*, however, he wishes it distinctly understood that he has never been, and in no case will he be, guilty of producing miscarriages or abortions.

Sexual Indifference.

This, on the part of husband or wife, is a frequent cause of matrimonial infelicity; so much so, as to demand the attention of the faithful physiologist. The necessity for reciprocity in the marital relation is treated at length in the chapter on adaptation in marriage, to which the reader is referred.

Sexual indifference of two kinds exists, viz.: anthropophobia and sexual apathy, as will be seen by turning to page 481. The former is characterized by the most intense aversion to sexual connection. The individual not only experiences no amative emotion, but feels the utmost disgust when required to yield to the conjugal embrace. Many who experience this feeling imagine that they are more chaste and more refined than those who are capable of amative excitement; but chastity or extraordinary refinement is never the cause. It results either from disease, or an uncongenial matrimonial alliance. Females are more subject to it than males, for the reason that their organs of procreation are more often diseased than those of the latter, and, further, because women are more apt to marry for wealth and homes than men. How can it be expected that a young and beautiful woman will heartily and affectionately welcome to her bed a decrepit old man, whom she has married merely because she wished to gratify her pride by the exhibition of the gewgaws of wealth? Or, if discrepancy in age does not exist, how soon the fires of amative passion die out and repugnance

takes their place, when the married couple are neither mentally nor physically adapted.

But when adaptation in marriage has been duly considered and observed, disease, as before remarked, may cause anthropophobia. Excessive mental labor of either sex may so divert the electrical or nervous stimulus from the organ of amativeness, that repugnance may take place of desire. Diseases of the brain may produce the same result, and sometimes induce impotency. Ulcerous, tumorous, cancerous, and inflammatory affections of the sexual parts in either sex, are apt to cause a disrelish or incapacity for coition.

Sexual apathy is more common than anthropophobia. The same causes which produce the latter may produce the former. The most common cause is impotency, which may exist in either sex, as already shown in the essay on "Impotency," commencing on page 544. When the erectile tissue and erectile muscles are paralyzed, inability to perform the act exists on the part of the husband; while a wife so affected, although capable of cohabiting mechanically, experiences no pleasure, and is only too glad to be released from her husband's embrace. One of the most prevailing causes of indisposition on the part of the female is leucorrhœa, the presence of which disease corrupts the alkaline secretions of the vagina, and so coats the lining as to render the parts insensible to electrical influences. It also prevents the evolution of frictional electricity by excessive lubrication of the clitoris.

It not unfrequently happens, that a want of proper development of the clitoris causes indisposition. This organ is so very small in some females, as to almost render production of amative excitement by friction impossible. For a few weeks or months after marriage, or until the individual electricities of the husband and wife become in a measure equalized, the bride enjoys her new relation, as well, or nearly as well, as any one; but after the magnetisms of the two by repeated contact become somewhat similar, the wife loses her excitability, and only after she and her husband have been absent from each other for a few weeks or months, and entirely regain the electrical conditions peculiar to them, does she enjoy the sexual embrace. Sexual indifference arising from this cause is difficult of cure, although mechanical remedies may be prescribed in some cases, and the difficulty thereby remedied to some extent.

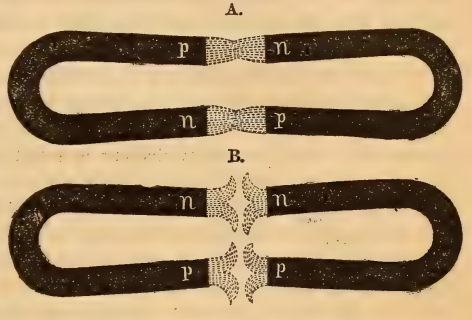
Protracted disuse of the sexual organs often produces apathy in women, and sometimes—not often—in men. I have remarked in another place, that, as a general rule, abstinence from sexual indulgence after reaching the age of pubescence, causes sexual indifference in women, and a morbid and almost mad desire for gratification in men. This I am confident from observation is true, nor is it difficult to account for it. If the unmarried woman does not practise masturbation; if, indeed, she gives no thought to

sexual matters whatever, the ova, or germs, nevertheless pass off as fast as they ripen, and do not accumulate in the system. On the other hand, there is no normal relief for a man except by sexual connection. In a few cases it may happen that the masculine constitution is such that no more of the seminal fluids are secreted and deposited in the seminal vesicles, than are needed by the system for masculine development. But, in most men, the system becomes overloaded with what might be called masculine qualities, including of course masculine magnetism, under which feeling it is difficult to withstand temptation. Hard mental labor may work up this surplus steam, but it is rather apt to drive one to secret vice, if relief is not obtained according to the means prescribed by nature. But the organs of women, unless they have due exercise, may become as powerless and apathetic, as the arm would if carried in a sling for a period of five or ten years. Any logical mind can see at once that the complete disuse of any organ of the body must necessarily be detrimental to health; this being the case, it is not strange that many young women arriving at pubescence at the age of thirteen to fifteen, and marrying at twenty or twenty-five, are liable to be rather unsatisfactory companions, unless these organs can be aroused from their lethargy by a husband who is powerfully magnetic. Secret habits in girlhood may produce either nymphomania or sexual apathy. The latter, in these cases, usually results from reaction from the former, for debility and impotency of the procreative organs are apt to succeed such physical violations in both men and women.

Want of physical adaptation is a frequent cause. Similar temperaments and habits produce similar electrical conditions. Between such persons there is a kind of electrical repulsion. There may be such a congeniality in tastes and sentiments as to give rise to the greatest friendship and esteem one for the other, but neither possesses the power to impart to the other a magnetic thrill by touch or contact. Allow me to introduce the horseshoe magnet to illustrate clearly this matter. In Figure 191, A may be used to represent a husband and wife, well mated physically. It will be observed that when the positive and negative (marked *p* and *n*), are brought together, there is perfect blending of the electrical or magnetic currents. One electrifies the other so that there is between animal bodies thus congenial an interchange of animal magnetism very pleasing to the senses. B may represent inadaptation. When husband and wife are of similar temperaments, the effect is the same as if two positives (marked *p p*) are brought together, and two negatives (marked *n n*) brought in contact. In this illustration it is seen that the dots, representing the magnetic currents, instead of blending and interchanging as in A, are repelled by each other. Now, so long as the electrical or magnetic forces of husband and wife are thus similar in quantity and quality, it is impossible for agreeable sen-

sations to be engendered or experienced by physical contact, and hence it is not to be expected that any great degree of sexual pleasure can take place between them in the copulative act. If any pleasure at all is experienced between parties sustaining these electrical relations to each other, it is obtained entirely from frictional electricity, as in masturbation, and the effects are injurious to both.

Fig. 191.



ADAPTATION AND INADAPTATION ILLUSTRATED.

If mental adaptation exists between the married pair, so that they really feel ardently attached to each other, this difficulty may be partially remedied for a few months or years, and in some cases permanently, by electrical and mechanical means, accompanied with due regard to diet, habits, etc. But when there is neither mental nor physical adaptation, the indifference is not only irremediable, but anthropophobia may succeed, and continue until the marriage tie is dissolved by divorce or death, and a new alliance formed. Cases do occur among ladies, in which, after years of sexual indifference with an uncongenial partner, a second alliance, formed under the most favorable auspices, yields no amative gratification. The reason for this is, that cohabitation without love or passion destroys, after a time, the sensibility of the parts. If you want to destroy digestion, crowd your stomach with food when you do not need it, or with things you do not relish; if you want to destroy the sensitiveness of the palate, eat and drink habitually those things which are perfectly obnoxious to the taste; if you wish to overcome the sensitiveness of the uterine organs, and render them not only insensible to pleasurable excitement, but, eventually, incapable of reproduction, marry a man who is distasteful and disagreeable to you; one who cannot call out the first spontaneous amative emotion, or kindle the first desire, while you continue sexual intercourse year after year. Of course he will insist on being gratified, and habitual cohabitation with such a man can only end in the production of an abnormal condition of those delicate organs.

Another possible cause of sexual apathy, is presented in the closing portion of the chapter, entitled, "Defects of Marriage." When anthropophobia or sexual apathy exists on the part of the wife, whatever may be the

cause, cohabitation is injurious to the husband; masturbation is not much worse than copulation under these circumstances. The wife fails to electrify him, and the pleasure he derives results mainly from friction, the same as in sexual abuse. In such instances seminal weakness or other nervous derangements are developed, such as afflict the habitual masturbator, and the physician is called upon to give his opinion and afford relief. I have had many such cases, and in no one of them did the sufferer seem to imagine the cause of his difficulties until I informed him.

Nothing can be more ridiculous than for a lady to arrogate to herself the possession of more voluntary chastity and virtue than her neighbor, because she feels no sexual desire. Nor can a husband present himself in a more laughable light to an experienced physiologist, than when he supposes that such apathy on the part of the wife is the result of extreme modesty and good breeding. If compulsory chastity, at the beginning of the menstrual period, lead to paralysis of the amative organs, no credit is due to her; for at the outset, she was restrained by custom, which she could not safely defy, and now she is apathetic because the organs are paralyzed. The fact is, the sexual appetite is just as natural as the appetite for food, and disease causes the loss of the one just as much as it does loss of the other. Fortunately, such exquisite people, as alluded to, are not numerous, or rather, do not so often present themselves to the skillful physician, as those who have more sensible ideas. It is no uncommon circumstance in my practice for ladies of education and refinement, affected with anthropophobia, or sexual apathy, to present their cases with the expressed conviction or seeming realization that their indifference is the result of disease. I admire the frankness and good sense of a wife like this, and I have been happily instrumental in remedying or curing the difficulty in a majority of such cases. In fact, sexual indifference in both sexes is usually partially, or wholly curable, except when both mental and physical adaptation have been disregarded in marriage. It is necessary first to ascertain the *cause* or *causes*, and this I can do whether the case be presented at my office, or by letter in answer to the questions beginning on page 583.

Food for Pregnant Women.

Experiment and observation have shown that the pains and perils of childbed may be greatly diminished, if pregnant women will only pay strict regard to their diet, and eat such food as possesses the least amount of calcareous matter. What I mean by calcareous matter, is that which, when taken into the system, goes to produce bone. There can be no mistake in the hypothesis that the fœtus in the womb is nourished by the same food which is eaten by the mother, and if this contains a large quantity of calcareous matter, the frame of the unborn child is too rapidly developed, in

consequence of which its delivery is attended with greater danger and more pain. It is not necessary to enter into an argument to show why a child with a large frame should give the mother more pain in its delivery than one with a small frame—the fact is self-evident. It matters little how fat the little fellow becomes, because his flesh is yielding and readily conforms to the shape of the passage; but a large and inflexible frame reverses the fact, and makes the passage conform to it. Many women, during gestation, mistakenly resort to the very diet which produces the most mischief. All kinds of bread, puddings, cakes, etc., made of Indian meal, usually so wholesome for people both in and out of health, are often used, to the exclusion of almost all other food, by pregnant women, under the erroneous supposition that they are best suited to their condition. Now, analysis shows that twelve thousand five hundred pounds of Indian corn contain one hundred and eighty pounds of calcareous matter, while the same quantity of rice contains only ten pounds! The flesh of young animals contains only one twenty-fourth as much calcareous matter as Indian corn, and all kinds of fruits contain only one three-hundred-and-sixtieth part as much. It is therefore plain that all preparations of Indian corn are an unsuitable diet for women who are pregnant, although no one will question their wholesomeness for nearly all persons under other circumstances.

Common salt, which performs a very important part in the animal organism, and also all condiments, contain nearly as large a percentage of calcareous matter as Indian corn; and although food is insipid without at least a moderate use of these luxuries, it would be well for all women who are about to become mothers to abstain as much as possible from their use until after confinement.

Potatoes are much better than wheat bread; barley bread better than either; and preparations of arrowroot, sago, and tapioca, better than any of these; while all kinds of fruits, like peaches, prunes, apricots, tamarinds, nectarines, cherries, plums, apples, pears, pineapples, oranges, lemons, figs, raisins, grapes, blackberries, strawberries, gooseberries, raspberries, cranberries, mulberries, elderberries, bilberries, currants, melons, etc., are the most harmless things that can be eaten during the period of pregnancy.

All kinds of animal food, and particularly eggs and milk, are admissible; also, such vegetable food as lettuce, celery, onions, beets, turnips, carrots, radishes, mushrooms, parsley, parsnips, and peas. But fruits lead all these in their freedom from calcareous matter, and are consequently best adapted to the condition of women in a state of pregnancy. Potatoes, preparations of corn, wheat, oat and rye flour, and beans, should be carefully avoided.

I have directed many women in the selection of proper food during gestation according to the foregoing rules, and, in all, the results have met my

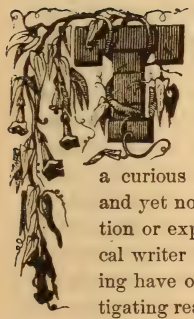
most sanguine expectations. Those who had previously suffered the most agonizing labor pains, found a happy diminution in their length and severity; others, who, from their compact build, anticipated painful and protracted labor, in many instances escaped with less than average suffering; while many have, in substance, said to me: "Doctor, it's nothing but fun to have children by pursuing your directions while *enceinte*."

Card to Married People.

In concluding this Chapter of Essays, I feel constrained to say that comparatively few married people attain the conjugal happiness which their relation is capable of imparting. Even those who are not altogether congenially mated, might, if moderation and proper remedial and conciliatory means were employed, pass the shoals and rocks of life's ruffled stream with comparative freedom from perplexity. When there is physical adaptation, sexual excess often detracts from the pleasures of the sexual embrace and the esteem which the married pair naturally feel for each other, while sexual indifference often results therefrom, embittering the cup from which they have sipped too excessively. Those who are not well mated physically are apt to fret in the uncongenial harness, and instead of adopting means to remedy in a measure the sexual indifference arising therefrom to one or both, allow mutual mental repugnance to set in to aggravate an estrangement, which, in the outset, might perhaps in some cases be overcome. Again, barrenness, as well as excess of offspring, is the bane of married life. While no family wants a house full of the interesting responsibilities with pretty eyes and blooming countenances, every "well-regulated family" is said to require one or more, and an entire absence of them not unfrequently creates a feeling of dissatisfaction. In nearly all cases, barrenness and excessive propagation may be remedied. Child-bearing may be promoted, or it may be prevented. In most all of these matrimonial annoyances, the old systems of medicine effect no relief, and those who are troubled with any of them settle into the erroneous impression that there is no relief for them. To such I would say, consult me freely, either in person or by letter. My post-office address is given in page 910, and a list of "Questions to Invalids" may be found on page 583. No one need hold back from fear that I will betray confidence—my tongue is ever silent in reference to the consultations of my patients. I am daily consulted at my office or by letter on subjects of the most delicate nature, and all such secrets are locked up or forgotten, while the advice I give in such cases, I am happy to find, is almost invariably successful.

CHAPTER VIII.

PHILOSOPHY OF CHILD-MARKING.



THERE are, perhaps, no functional phenomena which have engrossed the attention of medical writers to such a degree, as those pertaining to the formation of the physical and mental characteristics of the embryonic human being. Example after example, of a curious character, is given to surprise the wondering public, and yet no one seems to have ventured upon a philosophical solution or explanation of the cause or causes. Nearly every medical writer tells his reader what singular instances of child-marking have occurred under his observation, and nearly every investigating reader finds them in any number within the range of his own observation.

I will here present, in as concise a manner as possible, the facts which are revealed to the eye and ear of those who keep these organs of vision and hearing open. I will also present, after each fact, a few examples illustrative thereof, and that any reader of these, who is unacquainted with me, or unfamiliar with the subject, may not suspect that I have drawn on my imagination for them, I will only adduce such as have been related by other well-known writers. I could produce, from the testimony of various authors, an unlimited number of examples in corroboration of each of my following five affirmations; but two or three will answer as well as a dozen:—

FIRST.—As a rule, the child exhibits, in its physical and mental organization, more or less of the peculiarities of both parents.

SECOND.—The offspring often resembles only one of the parents.

EXAMPLES.—All my readers have living examples illustrative of the two preceding affirmations all around them, and, inasmuch as no one can be found unobserving enough to deny them, it is unnecessary to consume time and space with their relation.

THIRD.—The offspring frequently seems to possess none of the physical and mental characteristics of either parent. It sometimes looks like some good minister, doctor, or neighbor, when wife, minister, doctor, and neigh-

bor are all above reproach, at least, have done nothing to give rise to scandal or suspicion. Or, it may resemble some great man or woman whose physical appearance is preserved in portraits or pictures, and whose mental characteristics are described in biography. Or it may bear the impress of some singular dream.

EXAMPLES.—Prof. Britton tells us of a lady who lived in Fairfield County, Conn., and in universal esteem for her exemplary life and unblemished character, but who gave birth to a child who seemed to almost perfectly resemble the minister presiding over the church of which she was a member. The child has become a tall and graceful youth, and yet resembles the parson. The same writer also relates that a gentleman of his acquaintance, with very dark hair, beard, and eyes, wedded to a lady with brown hair, and a complexion no lighter than his own, had nine children, and, with a single exception, they all have dark straight hair and hazel eyes. Indeed, for several generations, not a single member of either family has had curly hair. The exceptional case is a fair youth with large, blue, expressive eyes, and golden locks having a natural tendency to curl.

Dr. Davis relates two interesting instances, as follows: "A woman of considerable physical courage, mounted a horse, rode side by side with her soldier-husband, and witnessed the drilling of the troops for battle. The exciting music and scene together inspired her with a deep thirst to behold a war and a conquest. This event transpired a few months before the birth of her child, whose name was—Napoleon."

"During the important period immediately preceding the birth of Dante, his young mother saw a startling vision of grandeur and great depth of significance. She beheld a populated globe of symmetrical proportions rise gradually out of the sea and float mid-heavens. It was decorated with every conceivable element of natural and artificial beauty. Upon a high and grand mountain, which melted away in the distant horizon and sloped gracefully into lands and lakes that spread out to the left, stood a man with brilliant countenance, whom she knew to be her son. Pointing with his upraised hand, he bade her look down to the right of the mountain. She beheld a precipice of abrupt ascent, like the walls of an immeasurable gulf with depth unknown. Whereupon she thought she fainted with excess of fright. But her son was as serene as a morning star; and, looking again, she saw no evil. After this beautiful and thrilling vision, Dante's mother had only in view the greatness of her unborn child—whose genius as a scholar and poet, as a creator of a world of fancies, is known throughout all the lands of civilization."

FOURTH.—A widow, remarried, not unfrequently bears children by a second husband resembling the first; maidens who have cohabited with some one of the other sex, either by consent or constraint, have borne, in

subsequent marriage, and in several successive confinements, children resembling the person with whom they first had intercourse.

EXAMPLES.—Rev. Charles McCombie states, that a lady neighbor of his, who was twice married, had five children by her first husband, and three by her second. One of these three, a daughter, bears unmistakable resemblance to its mother's first husband. The likeness, he remarks, was more discernible because there was such a marked difference in the features and general appearance of both husbands.

A Scotch physician communicated to Dr. Hollick a fact which came under his observation as follows: "A young female was forcibly violated by a person whom she did not know, and under such circumstances that she could not see him. It was known, however, by her friends, who he was, and, to avoid exposure, the matter was kept a secret, although, unfortunately, she became pregnant in consequence. The child strongly resembled its guilty parent, and the two children she had by marriage afterward also resembled him, although they were by her husband, the guilty young man having left the country.

"Dr. Dice says that he has certainly known one instance, if not more, in which a mulatto woman bore children to a white man, and that the same woman had to a mulatto man, children who bore much resemblance to the white man, both in complexion and features.

"Professor Simpson, of Edinburgh, gives an instance of a young woman of that city, born of white parents, whose mother, some time previous to her marriage, had a child by a mulatto man-servant, and this young lady exhibits distinct traces of the negro. Her hair, particularly, resembles that of the African."

FIFTH.—A pregnant lady may become frightened or annoyed by some disagreeable circumstance, or by some deformed or hideous object, and bring forth her child mentally affected thereby, or bearing a physical resemblance to the loathsome object.

EXAMPLES.—Dr. Pancoast relates the following: "A woman, absent from home, became alarmed by seeing a large fire in the direction of her own house, and bore a child with a distinct mark of a flame upon its forehead.

"A woman who had longed for a lobster, brought forth a child resembling one of those animals.

"A woman gave birth to a child covered with hair, and having the claws of a bear. This was attributed to her beholding the images and pictures of bears hung up in the palace of the Ursini family, to which she belonged."

Dr. Dixon, in a number of his *Scalpel*, relates the following: "Mr. H., of the northern part of the State of New York, married some forty years since. Pecuniary circumstances rendered offspring undesirable. Within a year,

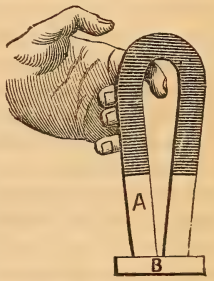
however, the wife thought herself with child. On expressing this belief to her husband, she was, at the moment, quite shocked at the dissatisfaction with which he received it. Taking his hat, he was absent from the house nearly an hour. He was distressed, on his return, to find his wife in tears. He assured her he was rejoiced to learn the probable realization of her announcement; and he was now satisfied with the condition of his pecuniary affairs. The wife dried her tears, and expressed her conviction that her offspring would suffer from her agitation. Her fears gradually increased as gestation advanced. A healthy and well-formed boy was born. After some months, it manifested an extreme unwillingness to approach the father. This gradually increased, until its dissatisfaction was manifested by loud and continued screaming when brought near him. As age advanced, the most persevering efforts were made to overcome this repugnance, and the attempt was abandoned in despair. This state continued, and, at the time of our receiving the information, the son, then an active and rising member of the bar, had never been able to speak a word to his father, although the most painful efforts were made."

Probably every person of mature age and much observation has seen as remarkable examples as those which are herein given. The uppermost question in the minds of every one cognizant of these phenomena is—how do they happen? I think I can explain to the entire satisfaction of every reader, but before perusing the explanations, turn back to page 633, and make yourselves familiar with my theory of the process by which the male and female germs unite for the formation of the fœtus, and then return here for the solution of the various phenomena indicated by the facts or examples presented in the preceding paragraphs. The same order will be observed in their explanation that was observed in their presentation.

First.—Why do offspring generally possess the characteristics of both parents? This can hardly result from any character imparted by the minute embryo contributed by each. They are both too small to exercise any very controlling influence, especially when it is considered how much the peculiarities of the child depend upon surrounding influences as well before as after birth. It is a trite proverb, that as a "twig is bent the tree inclines," and certainly if education and social surroundings can so change the character of the child after its advent into the world, how much easier the little germinal speck in the mother's womb may be governed by physical influences. Thousands of the little seminal animalculæ called spermatozoa could be contained in a shell of a single mustard seed, and the egg or ovum of the female does not weigh more than a two-thousandth part of a grain. The prospective constitutional health of the offspring is most undoubtedly influenced by the purity, healthfulness, and temperamental adaptation of the spermatozoon and ovum, but further than this, these germs probably

exercise very little control over the mental or physical organization of the fœtus. The investigating man will find that in the highest type of animal, as well as in the highest order of vegetable life, the seed itself seldom imparts the character of its progenitor to the offspring or product. I presume it will not be questioned by man, in his vanity, that the human being is the highest type of animal life, and I believe it is conceded that fruit-bearing plants and trees constitute the highest order of vegetable life. Therefore, if reasoning by analogy amounts to any thing, my hypothesis must be correct, for all horticulturists know how rarely an apple, peach, plum, pear, or cherry tree can be raised from the seed and possess the qualities of the parent tree. It is also useless to plant the seeds of strawberries, raspberries, blackberries, etc., with the expectation that the same quality of fruit can be reproduced by this process. It can rarely, if ever be done. And I am convinced that the further the matter is investigated, the more apparent it will appear that the germinal specks which give birth to the human embryo, have little or nothing to do with imparting character to the child. Then what is it that causes the child to resemble its parents? I reply, the influence of the magnetism of the husband upon the uterus of the wife, and the influence of her magnetism in conjunction with his, upon the fœtus in process of formation. We find that some of the metals may be permanently magnetized. Probably the majority of my readers have seen iron so magnetized that it would attract any small metallic bodies like tacks, nails, etc., and hold them as if they were glued to it. In the annexed illustration, A represents a horseshoe magnet which has been so magnetized, that it will pick up a piece of iron of considerable size, as represented by B, attracting it with so much force, that quite a pull is required to separate the two; Figure 193 represents a hammer which has been magnetized to such a degree that it will pick up nails without the aid of fingers. Its attractive power is sufficient to hold the nail by the head while the first blow is given to drive it in the wood. This magnet and the hammer impart, while they are in contact with metallic substances, their magnetic properties to them, so that they are entirely under their magnetic influence. Now, I hold that the influence of the male sexual organs over the uterus, etc., of the female, are in a measure analogous. The womb becomes magnetized,

Fig. 192.



HORSESHOE MAGNET,
Holding by attraction a bar of iron. A, the magnet; B, the iron bar.

Fig. 193.

A MAGNETIC HAMMER.
a represents the hammer attracting to it the tack *b*.

and, in many cases, permanently, by the male in copulation, and the individual magnetism so imparted to the womb, causes the organ to exercise an important influence upon the mental and physical character of the growing embryo which it contains, for seven or nine months. Do you ask how the magnetism is imparted? I answer that it may be imparted by the contact or friction of the male organ with the womb. Rub your knife-blade with a piece of magnetized iron, and for some time, that in turn, has the power of the magnet, and will attract particles of metal. The length of time the blade will retain this power depends upon the strength of the magnet and the length of time it has been applied; and the duration of the magnetism of the womb depends upon the magnetic power of the husband and the length of time it has been under his control.

Let it not be imagined that I consider the magnetism which governs the attraction of metals identical with that which the husband imparts to the uterus, or that the latter, strongly magnetized, would have any attractive power over metals. All kingdoms—animal, vegetable, and mineral—have magnetism peculiar to each, and I have only alluded to the magnetism peculiar to metals to illustrate my theory. I have already shown in this work that individual electricity or magnetism is possessed by every one, and that it exerts a remarkable influence over the sexual and social relations. Even the great ancient philosopher Socrates gives the history of what he experienced in the society of a lady friend in the following language: "Leaning my shoulder on her shoulder, and my head to hers, as we were reading together in a book, I felt, it is a fact, a sudden sting in my shoulder like the bite of a fly, which I still felt five or six days afterward, and a continual itching crept into my heart." Certainly the wise philosopher was too sensible to imagine this, and his amusing relation of his love experience only shows that he was susceptible to the magnetic power of his female associate. If it be admitted, as I think the pages of this work prove, in those parts in which the philosophy of sexual intercourse is discussed, that men and women are magnetized by each other, then it is self-evident that individual magnetism may be communicated to any susceptible part of the organism. In fact, this truth is verified by the effects of mesmeric operations on the external members of the body.

SECOND.—Why do offspring often resemble but one of the parents? After having read my explanation of fact first, it is easy to infer that some persons are less susceptible to magnetic influences than others. Thus the uterus of a wife may never become fully magnetized by the husband. She will produce children resembling herself, for the fœtus in its various stages of growth is almost exclusively under the control of her own magnetism. Then, again, the womb of another, more susceptible, will be so excessively charged with the magnetism or electricity of the husband, that the chil-

dren are perfect *fac-similes* of the father. But why do we sometimes find in a family, one, or more, resembling the father, and the rest having the mental and physical characteristics of the mother? Simply because many persons are subject to periodical exaltations and depressions of their magnetic powers; hence, when the exaltation of the husband's magnetism is coincident with the depression of that of his wife, then the uterus and the embryonic product are under the husband's control. When the magnetism of the wife is in the ascendant, then the development of the fœtus is under her magnetic control.

THIRD.—Why do children frequently possess none of the physical or mental characteristics of their parents? Because the magnetism of the mind of the mother, under the influence of some mental impression or impressions she receives, controls the development of the unborn child. If it be something she has read or dreamed, or a picture, or an object she has seen, and her mind is dwelling upon it, then the mental magnetism seems to overcome all merely local influences of her husband or her own, and the whole physical structure of the embryo, including the brain, is built up, particle on particle, and each atom moved to its place by the magnetic forces supplied by the mother's mind.

The magnetism of the mind is always superior to any local magnetism of the individual, and while the former may not interfere with the latter when there is nothing to disturb the normal equilibrium of the nervous system, any great mental emotion may change at once this harmonious status, and the mind's magnetism will assert its control, entirely supplanting the local electricity and magnetic operations going on in the uterus of a pregnant female, whose admiration, excited imagination, ungratified desire, or fear is excited. And here, an illustration is not wanting. The conduct of the atmospheric electricity toward telegraph wires which conduct galvanic forces from one region of the country to another may be instanced. The former is superior in quantity and power to the currents generated in the office of the telegraphic operator, and yet every thing goes smoothly on if the elements are undisturbed; but let a thunder-storm arise, and the lightnings of heaven not only assert their supremacy over the wires by the driving off or swallowing up of the operator's currents, but in some cases knock the operator over and melt his instruments.

If the offspring resemble some living man to whom the wife was much attached, then that person had, through the medium of her brain, magnetic control of her uterus just as much as if he had had physical contact therewith, while both parties may have been perfectly innocent of sexual connection. Indeed, if the pregnant wife has carnal desire for any gentleman, which she strives in vain to resist, the influence of her mind upon the fœtus is greater than could result from actual sexual intercourse, because

the workings of the magnetism of the mind upon the uterus always exert a more controlling influence, when once set in motion, than merely those of the magnetism of the procreative organs. As is proverbially the fact, pregnant ladies are very apt to mark their children with any thing for which they have a longing or an ungratified desire.

When a child seems to possess none of the physical or mental peculiarities of any one, so that the parents exclaim: "Who in the world does that child take after?" then the mother has been either mentally or physically magnetized by many different persons, or mentally impressed by objects, subjects, or biographies during gestation.

FOURTH.—Why does a widow in some cases have children in subsequent marriage resembling the first husband? Because her uterus is so permanently magnetized by the first that it requires time for her second husband to neutralize or overcome the magnetism of the first. With a remarkable instinct concerning the philosophy of this phenomenon, the semi-barbarians of Kamtschatka require a widow to sleep with a stranger before contracting a second marriage, which act, they say, purifies them and renders them eligible for subsequent espousement. They seem to imagine that this intermediate connection will neutralize the influence exerted by the first husband, although I am confident they are decidedly mistaken. As a rule, having its exceptions as already given, the male who first lives and cohabits with the female, governs, to a greater or less degree, the character of the offspring *ever after*. As a general rule I do not believe a wife is capable of having an illegitimate child, unless those which are influenced in embryonic life by mental magnetic impressions on the uterus, as described in answer to question third, can be so regarded. Nor am I alone in this opinion. Michelet, the philosopher and historian, in words of advice to husbands who have detected their wives in infidelity, remarks as follows:—

"You cannot abandon her. For how dangerous it will be for her, when the lover, who receives her, experiences the disgust of finding your reflection everywhere in her person, transformed through you! In discovering in her your voice, your words, your gestures, and traces even still more profound!

"She belongs to you to that degree, that even should her lover impregnate her, it will probably be your child—one marked with your features—that she will give him. He will have the punishment of seeing that he can have nothing real or profound from her, and that, in the capital point, in the generating union, he is unable to render her faithless."

My position on this subject is sustained by the testimony of those who have observed the effects of the first coition between animals and their subsequent offspring. It is authoritatively stated: "A mare belonging to Sir George Ousely was covered by a zebra, and gave birth to a striped hybrid.

The year following the same mare was covered by a thorough-bred horse, and the next succeeding year by another horse. But the foals thus produced were striped, and partook of the character of the zebra. And it is stated by Haller, and also by Becker, that when a mare has had a *mule* by an ass, afterward a foal by a horse, the foal exhibits traces of the ass. Cases are recorded of mares covered in every instance by horses, but by different horses, on different occasions—where the offspring partook of the character of the horse by which impregnation was first effected. It has often been observed that a well-bred bitch, if she has been impregnated by a mongrel dog, will not, although lined subsequently by a pure dog, bear thorough-bred puppies in the next two or three litters. The like occurrence has been noticed in the sow." Breeders of cattle are familiar with analogous facts as occurring in cows Says McGillivray: "Among cattle and horses they are of every-day occurrence." Now a man is just as much superior to the lower animals in his individual magnetism as he is in every other attribute, and we might consequently expect a more permanent magnetism of the human female by the one first cohabiting with her than can possibly take place under the same circumstances to the female of the brute creation. Then, again, if simply the first connection produces such a permanent effect, what may we not reasonably look for when a husband lives in such intimate relations with her, as he usually does, for years instead of a few months?

FIFTH.—Why are the effects of annoyances, frights, or sudden emotions of mind of the mother apt to be daguerreotyped upon the body or mind of the unborn child?

In accounting for these phenomena, I must again illustrate my theory with the electro-magnetic telegraph, for with this instrument almost every one is familiar. Continuous currents of electricity along the telegraph wire are sometimes suddenly interfered with by the approach of a cloud charged with atmospheric electricity, and when it comes in contact with the wire, it being in a higher degree positive, its electricity darts both ways on the latter, effecting a break, and driving in opposite directions the telegraphic current, which was a moment before uninterrupted between one distant office and another. As the cloud recedes from the wire, the telegraphic current resumes its path as if nothing had happened, but the strips of paper on which the registers impressed the messages give evident marks of the shock, and instances have occurred in which the telegraphic instruments were twisted in all manner of shapes. Now, frights may make their impression on the growing fœtus in obedience to the same electrical law. The individual electricity of the whole body may be compared to atmospheric electricity, and those electrical evolutions going on in the uterine organs to the electricity employed by the telegraphic operator. The fright, annoyance,

or whatever it may be, produces a sudden accumulation in the brain of the electrical forces of the nervous system, and as sudden propulsion of them to all parts of the system, including the uterus, where the local currents are interfered with by the intrusion of the more powerful and instantaneous currents from the brain, bearing a daguerreotype of the object or subject which causes the fright or annoyance. All who have ever experienced fright know the sensation; first, a sudden pressure in the brain, as if the blood had all rushed thither, and in another instant a peculiar sensation in every inch of the body, extending to the very ends of the fingers and toes. Sometimes the fright deals a death-blow to the fœtus, through a ponderous wave of mental electricity precipitated on the uterus, just as the telegraphic operator is stunned or rendered senseless by the atmospheric shock; but if no miscarriage occurs, and the local currents resume their action, the fœtus is almost sure to show some marks of the sudden intrusion, either on its mind or body, or both, just as the strips of paper passing through the telegraphic register receive some peculiar impressions or marks under the circumstances named. Extreme cases of malformation may be compared to those remarkable instances when the telegraphic apparatus is twisted and distorted by the intrusion of the atmospheric currents.

We may more reasonably look for the daguerreotyping of objects on the embryo human being in the womb, by electrical disturbances under the influence of the mind (the eye of the mother serving as a camera), than for such effects to take place on the full-grown adult by disturbances of the atmospheric element, and yet the following facts gleaned from newspapers show that the latter are possible:—

"A countrywoman has recently arrived in Paris from the department of Seine et Marne, who should be presented to the Academy of Sciences. This woman was, a short time since, watching a cow in an open field, when a violent storm arose. She took refuge under a tree, which, at the instant, was struck by lightning; the cow was killed, and she was felled to the ground, senseless, where she was soon found, the storm having ceased with the flash that felled her. Upon removing her clothing, the exact image of the cow killed by her side was found distinctly impressed upon her bosom."

"A correspondent of the New York *Independent* says this curious phenomenon is not without a precedent. Dr. Franklin mentions the case of a man who was standing in the door of a house, in a thunder-storm, and who was looking at a tree directly before him, when it was struck by lightning. On the man's breast was left a perfect daguerreotype of the tree."

"In 1841, a magistrate and a miller's boy were struck by lightning, near a poplar-tree in one of the provinces of France, and upon the breasts of each were found spots, exactly resembling the leaves of the poplar."

I cannot, nor is it necessary, to follow out this interesting subject with

the numerous suggestions, illustrations, and explanations which crowd upon my mind at this moment. I am confident I have given the key to unlock the mystery of "child-marking," as this class of phenomena is generally called, and the ingenious mind can, with it, account for every case, however peculiar, which the sparsely populated village and the crowded metropolis present.

Let no one having children bearing no resemblance to themselves be pained by any inferences they may draw from what I have offered. It is often well that children do not take after their parents in their physical formation or mental organization. If they exhibit talent, goodness, or physical beauty superior to the parents, then well may the latter congratulate themselves, even if such superiority has obliterated every mark of family resemblance. In reality, none of our children belong to us. God has established certain laws for the perpetuation of the race, and our little darlings and pets, with their roguish blue and flashing black eyes, whose presence lends cheer to our households, and gayety to the hearts of doting grandmas and grandpas, all belong to one common Father—God, who owns them just as much as the manufacturer owns the fabrics turned out by his mills. An ingenious mechanic may invent a machine which only needs to be set in motion each day, to turn out some articles of acknowledged utility. No one supposes the machine owns these goods. We all are God's agents for perpetuating our kind, and He has ordained certain laws to prevent the race from becoming extinct. But our children are not ours; they are His. We may feel flattered when we see them partake so much of our flesh, blood, and magnetism, as to reflect our images; but even this is the result of our vanity, and whether they do or not, we are bound by every principle of humanity and religion to love, properly protect, and correctly train, the helpless human miniatures, until they become old enough to take care of themselves. The most important work we have to perform while they are in the mother's womb, is to, as far as possible, protect them from moral, mental, and physical malformation. To this end, the mind of the mother should dwell on subjects of an improving and elevating character. It should be kept tranquil and happy; free from sudden and disagreeable emotions of any kind; but all this is impossible, if she be unhappily married, or if she daily meets, in her out-of-door exercises, deformed and loathsome people. Accidents will occasionally happen to shock the nerves of pregnant women, but deformed people should be kept out of public thoroughfares, and ill-assorted marriages should be interdicted by law.

CHAPTER IX.

ESSAYS FOR YOUNG AND OLD, BEARING ON HAPPINESS IN MARRIAGE.

OME very important reforms are necessary to make monogamic marriage what it should be. Many of these have already been pressed upon the attention of the reader. The most important of them all is adaptation in marriage, as exhibited in Chapter II. of this part. To secure this, you should put yourself in positions to meet with a variety of individuals of the sex opposite; seek, rather than avoid, society; familiarize your minds with mental adaptation, and especially with physical adaptation; study carefully the temperaments, and avoid much social intimacy with those who are not temperamentally adapted, as it is often the case that a platonic attachment springs up between two who are totally unsuited physiologically to come together in wedlock, and this mental congeniality leads the two platonic lovers to so far commit themselves that they cannot gracefully "back out" of an engagement. This is unfortunate for the present, and, in many cases, disastrous in the future. Such engagements, if made, may better be broken if both of the parties concerned can consent to this course. It becomes a difficult, if not cruel alternative, when one of the parties cannot detach the fixed affections. It is hard to advise in a case of this kind, but physiological facts should be presented to the one whose constancy exists in spite of alleged incompatibility, and in most intelligent minds they would not be revealed without producing a wholesome result. Above all things, never marry for a home, for money, for position, for revenge, for obstinacy, to please friends, nor to show your gratitude to any one who has greatly befriended you in adversity, or saved your life when in peril. In the last-mentioned consideration you may much better give all you have and mortgage all your prospective gain as a recompense, than to deed away your future happiness.

Early Marriage.

Much has been written pro and con regarding the expediency of early marriage. Physiologists, I believe, are about equally divided in their opinions on this question. The opposers of early marriage contend that the offspring of young parents are not as strong, physically and mentally, as those of parents of more mature age, and give the names of Coleridge, Goldsmith, Wirt, Richelieu, Oberlin, Ignatius Loyola, and other distinguished poets, statesmen, and philosophers, together with the fact that they were the youngest children of their parents, as illustrative examples of the correctness of their theory.

While it is useless to deny that a majority of the world's great men were not the first-born, it is rather jumping at a conclusion to attribute the cause entirely to the maturity of their parents. Many great men are the eldest children of their progenitors, and I am firmly convinced that many more would be, except for the sexual excesses to which nearly all newly-married people are given. In fact, it is almost surprising that there are any first or second children who acquire distinction, considering the mental and physical enervation which nearly all newly-married people bring upon themselves by the constant amative excitement under which they are pleased to keep themselves, while the romance and novelty of their new relation remain. It must, therefore, necessarily require several years of moderation for their systems to regain their wonted energies, and, as a sequence, we may reasonably look for the best specimens of the *genus homo* among the youngest offspring of parents. If this reasoning is correct, and I appeal to the candid judgment of all experienced physiological observers if it is not, the chief and only important argument against early marriage is futile, while the arguments in favor of early marriage are numerous and momentous.

When God created man, He implanted in him two passions stronger than all others, the ultimate object of one being to sustain life, and that of the other to reproduce it. One passion calls for food, the other for sexual magnetism. Starvation of either often dethrones reason and renders men reckless and unmanageable. A man who is denied alimentary food scruples not to break locks and destroy life to obtain means for the gratification of his appetite. A man who is denied sexual food violates virtue and social regulations, or himself, for the gratification of his carnal appetite. Now, as to the precise time when these appetites should be gratified, it would seem that nature had distinctly indicated, and that is, *when they manifest themselves.* Immediately after birth the child exhibits an appetite for food, and the humane mother does not deny it nourishment, nor would she listen to the advice of any philosopher who directed her to deprive her offspring of the nourishment of her breast till it arrived at a certain age, adjudged proper

by his school of *savants*. Appetite for food is thus early developed because the existence and growth of the infant depend on immediate and repeated nourishment; but sexual appetite remains undeveloped for many years, because its immediate manifestation is not necessary for reproduction. Now the question arises, *does nature develop the latter before the individual is qualified for the propagation of perfect specimens of his kind?* All who have observed the perfection of nature in all her works will unhesitatingly answer—No! Then we are to conclude that the age of puberty is that which nature appointed for marriage, are we? Yes, I reply, if we make a few years' allowance for the prematurity induced by the improprieties of parents and the improper training and bad habits of children. The organ of amativeness is frequently too largely developed in the embryonic offspring by the excessive indulgence of the parents in sexual pleasures during the period of gestation. After the birth of the child, he is usually feasted on meats, tea and coffee, and other stimulating food and drink, fit only for persons of adult age, by which sexual precocity is produced. In consequence of these habits, for which parents are responsible, nature is in a measure perverted, and the sexual appetite is created a few years earlier than nature designed. Hence, even in this climate, girls usually commence menstruating at the age of thirteen or fourteen, and boys are often victims to habits of masturbation at twelve or thirteen. Nature's directions have been, in a measure, destroyed, as were the tables of the commandments in the days of Moses; but they may be restored in a few generations, if mankind will but return to the observance of the laws of life and health.

Notwithstanding, however, nature is to a certain extent anticipated in the development of the sexual appetite, the fact that sexual desires are manifested at an early period of manhood and womanhood is a strong argument in favor of early marriage, in view of which men and women should marry as soon after puberty as they are qualified to assume the cares and responsibilities which the relation entails; and, by this remark, I do not mean until they get rich, or in a position to live fashionably, but as soon as they can honorably support themselves and the children which may be born to them.

In England, the 26th year is the mean age at which men marry, and the 25th, that at which women marry. In this country, the 24th year is the mean age at which men marry, and the 18th, that at which women marry. Now, I am not aware that the English surpass the Yankees in mental power, and if they do in physical strength, it is nothing more than we might expect when we contrast the habits of the English women with those of this country. The former are noted for their love of pedestrian exercise, and the latter for their devotion to badly-ventilated kitchens or parlors, and sedentary habits generally. That early marriage does not produce physical weakness, we have only to look at the Chinese, who regard a

bachelor of *twenty* as an object of contempt! Still the "Celestials" have a fair reputation for physical strength, and deformity is not common among them.

The tendency of early marriage, if formed on true principles, with due regard to the teachings of physiology and phrenology, is wholesome and elevating. "Every school-boy knows," says a newspaper writer, "that a kite would not fly unless it had a string tying it down. It is just so in life. The man who is tied down by half-a-dozen blooming responsibilities and their mother, will make a higher and stronger flight than the bachelor, who, having nothing to keep him steady, is always floundering in the mud. If you want to rise in the world, tie yourself to somebody."

Southey says that "a man may be cheerful and contented in celibacy, but I do not think he can ever be happy; it is an unnatural state, and the best feelings of his nature are never called into action." Now, if it is an "unnatural state" for a man at thirty-five, it must be equally so at twenty-five, and even for a young man who has but just attained the age of puberty.

"Early marriages, wherever they can be contracted with any ordinary regard to prudence," says Dr. Wardlaw, of Scotland, in his lectures on Magdalenism, "are among the best preventives of prostitution; and whatever contributes to hinder the formation of these, may be regarded as standing chargeable with their share of its encouragement, as ranking among the causes of Magdalenism. I deny not that prudence is a virtue, and the question of marriage is a proper sphere for its exercise. But there cannot be a doubt that high notions, which, by the refinement and extravagance of our times, have been introduced, of the *style* in which young men entering on life must set up their domestic establishment, have, in many instances, laid restraints on the early cultivation of virtuous love, and prevented the happy union of hearts in youthful wedlock. I cannot look upon this as at all an improvement on the homely habits of our fathers. Many are the young men who are thus tempted to remain single by their felt inability to *start* in what is regarded a somewhat *creditable* style. Would to God I had the ear of all the youth in our city, and in our country, that I might tell them of the sweets of early virtuous union; and that I might earnestly and affectionately urge them to consult their own best interests, and to set an example pregnant with the most beneficial results to the community, by bidding defiance to the tyranny of fashion; by returning to the good old way; by finding a partner who will marry from love; and who will be willing and more than willing to begin upon little, and by the blessing of Providence, to rise gradually to more. *That* was the way in the olden time; and, although no croaker for the superiority of all that pertained to ancestry, *this*, most assuredly, is a point in which I should say of

the former days, 'they were better than these.' I would say to the rising youth—the hopes of coming generations—'Moderate your views; defy custom; marry; fear God; be virtuous; and be happy.' Could my voice and my counsel prevail, what a salutary check would be given to the prevalence of the vice which is our present subject."

Celibacy is almost incompatible with virtue, and masturbation and prostitution cannot fail to result from deferring marriage much beyond the age of puberty. A life of celibacy is rarely a life of virtue, and I make the remark without ignoring the fact that Newton, Galileo, Michael Angelo, Locke, Hume, Pope, Bacon, Voltaire, Cowper, and many other distinguished men, have lived and died old bachelors. The inborn sexual passion is generally too strong in man to be safely denied gratification, and if not gratified in marriage, it is apt to seek gratification in the dens of harlotry, or the secret chamber of the masturbator. Yet, those who possess not this passion, "are of all men most miserable." "The difference between a thoroughly selfish old bachelor, and a man that is married and fit to be married to a woman he loves," says Dixon, "is about the same as that of an American yacht and a Chinese junk: one will sail in the very eye of the wind, the other only when it is dead astern."

"Your true bachelor," says the same writer, "is stupid and awkward, and requires an immense berth; he is given to seat himself in the lady's chair, and to toast his shins before the middle of the fire; very solicitous is he about his creature comforts, and a perfect stoic to woman's charms. He takes no hints; never mind how coolly he is treated, nor what symptoms of the opera or an evening party to which he has not been invited he may perceive, so much the more will he not go. Nay, the very appearance of the lady's gallant will not move him; he can inflict himself and his twaddle on some unfortunate member of the family; she may make the best of him, for her martyrdom is certain. If there be a stupid and good-natured brother who smokes fine cigars, and he will tolerate the insult to the sister, the sitting-room will be rendered peculiarly acceptable at breakfast to those who have delicate olfactories. The mental peculiarities of this creature are all characterized by dogmatism and selfishness, and no one at all familiar with the animal can fail at once to detect him.

"The marriage of a young girl to such an individual can be productive of nothing but unhappiness: it is equally opposed to experience and natural instinct. The soul, as well as the body, shrinks into arid selfishness when it does not early bow to woman's charms. The lightning of the eye and the music of the voice are quenched by the vice of celibacy, and the miserable creature dreams not that the forfeit of his devotion to his personal comforts is nothing less than the capacity of their enjoyment."

Business Avocations should be open to Females.

One prolific cause of unhappy marriages is the limited sphere allowed females in which to exercise their ingenuity and talents for self-maintenance. In most parts of the civilized world it is not considered strictly respectable for a lady to pursue any active avocation sufficient in itself to give her comfortable support. Daughters are expected to lead idle lives under the parental roof until they can catch husbands; and, if their parents are not in circumstances of affluence, marriage is their only refuge from pecuniary want in advanced age. The result is that women daily marry homes with little regard to the feelings they entertain for their proprietors.

Now, this is all wrong, and should be remedied by opening for their pursuit all departments of business which they are physically qualified to conduct, and by giving them, at public schools, such *practical* educations as will enable them to compete successfully with their neighbors in broadcloth. I know that there exists no civil law against women becoming merchants, lawyers, doctors, etc., but society has established a code which is about as effective as if it came by authority of state, particularly as the education imparted to females in the family and in school is such as to practically enforce obedience thereto.

"Our girls are educated," says a writer, "not to develop their faculties as human beings; not to give the freest scope to their talents and aid them in the pursuit of happiness; not to qualify them for the struggle of an earnest life, for honorable independence by industry, art, or literature. No, they are educated, ostensibly and at best, to make good wives and mothers, frequently that they may be successful in catching husbands. Whatever knowledge a husband may think desirable, whatever accomplishments may aid them to entice and entrap some man of a suitable position to marry them; whatever may fit them to shine in those resorts of fashion and gayety which are our matrimonial markets, in these things our daughters receive instruction."

To show the necessity of women throwing off their dependence on the coarser sex, I cannot do better than quote Mrs. Jamieson. She says: "In these days, when society is becoming every day more artificial and more complex, and marriage, as the gentlemen assure us, more and more expensive, hazardous, and inexpedient, women must find means to fill up the void in existence. Men, our natural protectors, our lawgivers, our masters, throw us upon our own resources; the qualities which they pretend to admire in us—the overflowing, the clinging affections of a warm heart—the household devotion—the submissive wish to please, that feels every

vanity in fondness lost'—the tender, shrinking sensitiveness which Adam thought so charming in his Eve—to cultivate these, to make them, by artificial means, the staple of the womanly character, is it not to cultivate a taste for sunshine and roses in those we send to spend their lives in the arctic zone? We have gone away from nature, and we must, if we can, substitute another nature.

"Art, literature, and science remain to us. Religion—which formerly opened the doors of nunneries and convents to forlorn women—now mingling her beautiful and soothing influence with resources which the prejudices have yet left open to us, only in the assiduous employment of such faculties as we are permitted to exercise, can we find health, and peace, and compensation for the wasted or repulsed impulses and energies more proper to our sex—more natural, perhaps more pleasing to God; but trusting in His mercy, and using the means He has given, we must do the best we can for ourselves and for our sisterhood. The prejudices which would have shut us out from nobler consolation and occupations, have ceased, in great part, and will soon be remembered only as the rude, coarse barbarism of a bygone age. Let us, then, have no more caricatures of methodistical, card-playing, and acrimonious old maids. Let us have no more of scandal, parrots, cats, or lap-dogs—or worse!—these never-failing subjects of derision with the vulgar and the frivolous, but the source of a thousand compassionate and melancholy feelings in those who can reflect! In the name of humanity and womanhood, let us have no more of them. Coleridge, who has said and written the most beautiful, the most tender, the most reverential things of woman—who understands better than any man, any poet, what I call the metaphysics of love—Coleridge, as you will remember, has asserted that the perfection of a woman's character is to be characterless. 'Every man,' said he, 'would like to have an Ophelia or a Desdemona for his wife.' No doubt; the sentiment is truly a masculine one; and what was their fate? What would now be the fate of such unresisting and confiding angels? Is this the age of Arcadia? Do we live among Paladins and Sir Charles Grandisons? and are our weakness, and our innocence, and our ignorance, safeguards—or snares? Do we, indeed, find our account in being 'fine by defect, and beautifully weak?' No, no; women need, in these times, character beyond any thing else; the qualities which will enable them to endure and resist evil; the self-governed, the cultivated, active mind, to protect and to maintain ourselves. How many wretched women marry for maintenance! How many wretched women sell themselves to dishonor for bread! and there is small difference, if any, in the infamy and the misery! How many unmarried women live in heart-wearing dependence; if poor, in solitary penury—loveless, joyless, unendeared; if rich, in aimless, pitiless trifling! How many, strange to say, marry for the independence

they dare not otherwise claim! But, the snare-paths open to us, the less fear that we should go astray.

"Surely it is dangerous, it is wicked, in these days, to follow the old saw, to bring up women to be 'happy wives and mothers;' that is to say, to let all her accomplishments, her sentiments, her views of life, take one direction; as if for women there existed only one destiny, one hope, one blessing, one object, one passion in existence. Some people say it ought to be so, but we know it is not so; we know that hundreds, that thousands of women are not happy wives and mothers—are never either wives or mothers at all. The cultivation of the moral strength and the active energies of a woman's mind, together with the intellectual faculties and tastes, will not make a woman a less good, less happy wife and mother, and will enable her to find content and independence when denied love and happiness."

Nothing need be added to the sensible words quoted from the arguments of a sensible woman. I will only advise, nay, *urge* women *to crowd themselves* into all business pursuits for which they are physically qualified, such as—wholesaling and retailing dry-goods, books, stationery, household wares, etc; manufacturing and selling cotton and woolen goods, fine shoes, confectionery, cultivating and canning fruits; and a thousand other avocations, not excepting, when mental as well as physical qualifications are possessed, the various professions, and especially that of medicine. Art, too, is something in which women gifted in this direction may excel. Any thing and every thing to the end that women may become less dependent upon their "legal protectors," and be enabled to live lives of "single blessedness," rather than unite themselves to disagreeable masses of masculine blood and bones, for the mere sake of escaping from poverty and starvation. Remember that, in the eyes of God, respectable prostitution, such as marrying for homes and wealth, is no better than that practised by abandoned women. There is not the shadow of a reason that woman should be pecuniarily *dependent* upon man. Although in few respects like him, she is in all respects *naturally* his equal. And notwithstanding she has been educated for centuries past to not only feel, but acknowledge, mental superiority on the part of the "lords of creation," there have been, from time to time, bursting forth from her sex, intellectual lights like Madames De Staël, De Genlis, Martineau, Wright, Elizabeth Cady Stanton, etc., to remind her of her slumbering genius. I have not patience to bring forward facts and arguments, numerous though they are, to prove that woman is mentally and physically capable of maintaining herself. It seems to me like a contemptible insult to her palpable ability, to directly or indirectly raise the question,

Ladies Should be Allowed to Pop the Question.

What! solicit gentlemen to marry them? Certainly!—why not? Have not ladies preferences which they have a *natural* right to indicate as well as gentlemen? Is there any good reason why ladies should not have the privilege to choose, as well as refuse? Strange, how firmly rooted false notions become by education! Custom is a powerful law-maker, but not always a just one. He is particularly despotic in his conduct to ladies, and winks at many improprieties committed by gentlemen. He opens to man a wide field for industry and the accumulation of wealth; to woman he gives a "seven-by-nine" room, in which she may labor in penury until she can obtain absolution by marriage. And then, to crown all, if she wishes to marry, the old tyrant commands her to wait and accept or refuse such offers

Fig. 194.

YOUNG REBELS OF THE YEAR 1900 AGAINST OLD KING CUSTOM.

as may be made, while to man he gives the exclusive prerogative of choice! True, woman has choice between her suitors, if she have more than one; but it is often synonymous with a "choice between two evils," while man may select from a hundred or a thousand. Women, in justice to themselves and their female posterity, should rebel against this despotism as did our revolutionary fathers against British tyranny in colonial times. Emperors and kings do not monopolize despotism. Custom, though not himself a despot, is often despotic, and women are the most patient and uncomplaining victims of his tyranny.

"How many women," says Dr. Davis, "have wished themselves men! Because, simply, that a ridiculous custom deprives women of social freedom.

* * What wonder that some strong women-natures have burst the bonds, and steeled their hearts against the shafts of ridicule and derision! How low must be the social state which curtails the social liberties of woman! She has no liberties to *first* manifest her preference to some kindred spirit of the opposite gender. No, indeed! If a woman should visit a man first, and inform him of her love toward him, the whole community would at once conclude that such a one 'is no better than she should be.'"

Robert Southey, the poet, who would perhaps have laughed at the proposition of giving ladies the right to ask the hand of gentlemen in marriage, once said that "the *risks* of marriage are far greater on the *woman's side.*" "*Women,*" he added, "*have so little the power of choice*, that it is not, perhaps, fair to say they are less likely to choose well than we are." He further said: "I know of nothing which a good and sensible man is so certain to find, if he looks for it, as a good wife." I am equally certain that there is nothing which a good and sensible woman would so certainly find, *if she were allowed to look for it*, as a good husband. I deny that "their opinions concerning men are less accurate than men's opinions of their sex," as has been asserted. Neither sex deserves great credit for judging of human character, especially before marriage; but women, as a rule, are gifted with keener perception than gentlemen. The female sex would not get cheated oftener in marriage than the male sex, if the former enjoyed the same prerogative to choose that the latter arrogates to itself. "Manage as they may," says Nichols, "girls must wait for offers, and be the choice generally of a very narrow circle; and there is always a great temptation to accept the first, for fear of never having another." While this fact must universally be admitted, there is not a single good reason which can be urged against giving to ladies the right to manifest their preferences; but many may be adduced in favor of allowing them the valuable privilege.

It frequently happens that an aristocratic lady's true counterpart is among the ranks of the humble, and while he would not dare to approach her with a proposition of marriage, she *must not*, no matter how strong her affection for him, because custom forbids such a breach (?) of propriety. Many instances of this kind have come to my knowledge. A man in circumstances of affluence feels no delicacy in proposing to a woman in humble life; but if their circumstances are reversed, he fears his aspirations may be treated with scorn if he essays to offer her his hand in marriage. He thinks himself the recipient of great favor if she treats him with politeness and attention, and dare not think her conduct toward him is actuated by a desire that he should propose marriage. So bold a step on his part might forfeit even her friendship, and he chooses rather to remain sure in the possession of this than to encounter self-mortification and her displeasure, possibly, by soliciting her love. She perceives his diffidence, and wishes she

might, for one moment, avail herself of his prerogative. But she hesitates. She, too, may mistake his sentiments; and, if so, and she should propose, what would the neighbors say? How people would laugh! Months roll on and she, failing to make him understand her real sentiments, bestows her hand on some worthless fop who has more money than brains, and who has had the bravery to offer himself because he flourishes in the same circle of society that she does. She accepts because she may not have a better offer, and perhaps because he has a sister she loves, even if she does not love him; and therefore she considers the family connection a happy one. This is no fancy picture. Every observer knows that instances of this kind are of frequent occurrence.

Diffidence often prevents gentlemen from proposing, when their "sweethearts" occupy the same social position with themselves; and ladies, under such circumstances, would often "help them out," if they felt that they had a right to. L. N. Fowler relates an interesting example of this kind: "A very worthy, honest, diffident man, of the city of New York, paid his addresses to a young lady of equal worth and virtue, and the acquaintance became so intimate that he spent most of his leisure hours with her, always waited on her to and from church, etc., and continued so to do until *fifteen years had elapsed;* by this time the patience of the young woman became exhausted, and she resolved on bringing matters to a crisis. So she informed her lover, on his next visit, that she was about to leave the city. 'Are you?' replied he with surprise. '*When* are you going?' 'To-morrow.' '*Where* are you going?' 'I don't know.' 'What shall I do? How long do you intend to be gone?' 'I don't know what you will do, neither do I know how long I shall be gone,' said she; 'and now if you want me, say so, and take me; for now is your last opportunity.' He took the hint, and, arrangements being made, they were soon married. After he had tasted the sweets of married life, said he, 'Wife, why did you not say so before; for we might have been married fifteen years ago, as well as now, if you had merely said the word. I was ready to marry, and resolved to make the proposal again and again; but each time my heart would rise in my throat, so that I could not speak.'" Now, according to social etiquette, this lady was guilty of gross impropriety when she said to her bashful lover, "If you want me, say so, and take me." She would no doubt have said the same thing many years previous, had not custom forbade it; and she would most undoubtedly have married some *one she loved less* before the expiration of the long term of courtship, had another offered!

It belongs to women to work a reform in this matter. They must "declare their independence," and sustain each other in assuming a prerogative which rightly belongs to them. If a group of ladies are informed, by an amazed biped in broadcloth, that Miss Somebody actually asked Mr.

Somebodyelse to marry her, they must not laugh and join with him in ridiculing the heroic girl, but unite with one accord in praising her for her courage, and *lash with sarcasm* the masculine gossiper who has heralded the report to them. It is all wrong that the gentlemen have a world full of fair ones to select from, while ladies can only choose between two, three, or half-a-dozen stupid admirers, who may offer themselves. There is no reason that it should be so, and the female sex is recreant to its own rights and happiness, if it does not assume the right to choose and propose.

Card to the Unmarried.

The author of this work is often applied to personally or by letter for advice, by both young women and young men desiring to marry or contemplating marriage. One thinks he or she has some physical malformation, injury, or infirmity which would render such a step unadvisable. Another fears the law of mental and physical adaptation will be disregarded, followed with conjugal unhappiness, if a certain pending courtship should result in marriage, or an actual engagement be fulfilled, and daguerreotypes or photographs of both parties, with descriptions of persons and characters, are presented for my decision and advice. Other matters of similar import are frequently laid before me in personal consultations or by letter. As these matters require time, and often considerable consideration, and do not belong to the ordinary labors of a physician, a fee of $5 will be charged for all such advice. Advice of this character will, at all times, be cheerfully given, if these terms are complied with, and all such consultations will be treated with entire *confidence.*

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